

# Strategy Notes

Disads:

Regulations Bad DA – Affs that impose regulations or limitations on the economy risk overregulation that will hurt economic growth at a crucial moment in the recovery. Economic decline = bad

Spending Bad DA – Affs that require US spending/investment by the fed government risk increase in deficit spending at a moment when we are getting our fiscal house in order. Deficit spending trades off with the private investment necessary to keep growth moving. Deficit spending now risk economic decline that's bad

Growth bad frontline – Affs that claim increase in growth could be impact turned. You need some impact cards in some modules but basically complete to impact turn.

Lots of internal link and link work (both ways) to assist in frontline writing versus advantages.

# Shells

# **Regulations Bad DA 1nc Shell**

**Uniqueness – economic recovery fragile – continued job growth necessary for sustained recovery**

**Reuters, July 16 2014** ("US economic recovery not yet complete, says Fed chairman")

<http://www.scmp.com/business/economy/article/1555074/us-economic-recovery-not-yet-complete-says-fed-chairman> accessed tm 7/16/14)

The United States' economic recovery remains incomplete, with a still-ailing job market and stagnant wages justifying loose monetary policy for the foreseeable future, Federal Reserve chairman Janet Yellen told a Senate committee yesterday. Yellen said that early signs of a pickup in inflation were not enough for the Fed to accelerate its plans for raising interest rates, a move currently expected in the middle of next year. That could change, with interest rates rising sooner and faster, if data showed labour markets improving more quickly than expected, she said. But as it stood, "although the economy continues to improve, the recovery is not yet complete", Yellen said in semi-annual testimony before the Senate banking committee, repeating her focus on lagging labour force participation and weak wage growth as key to any conclusions about the economy's health. "Too many Americans remain unemployed," she said.

**Link – regulations and protections for the environment divert resources from growth and impose economic costs that limit economy – climate proves**

**Dercon, 2014**

(Stefan, Policy Research Working Paper6936 "Is Green Growth Good for the Poor?" June 24 2014

[http://www.wds.worldbank.org/servlet/WDSCContentServer/WDSP/IB/2014/06/24/000158349\\_20140624092056/Rendered/PDF/WPS6936.pdf](http://www.wds.worldbank.org/servlet/WDSCContentServer/WDSP/IB/2014/06/24/000158349_20140624092056/Rendered/PDF/WPS6936.pdf) accessed tm 7/16)

All of these processes will be exacerbated as the pressures to reduce greenhouse emissions lower global growth, with impacts on the export demand of these transforming economies and therefore on jobs and income growth. These poor and emerging economies will also face pressures to reduce their own emissions, thus also reducing growth opportunities. Indirect effects could also arise as pressures for the global reduction of greenhouse gas emissions impose costs on the world economy, thereby limiting global GDP growth and affecting both the demand and for poorer countries' exports and their income growth. Furthermore, although poor countries generally have much lower greenhouse gas emissions than do higher income countries, there is likely to be increasing pressure to force low-income countries to curb their emissions as well. This would further increase the costs of transformation to a higher-return economy. Finally, climate change is only one source of environmental pressure that has serious impacts in many developing countries and elsewhere. Curbing environmentally damaging activities to safeguard natural resources for the future as well as the population's health and the quality of life will divert resources from growth-oriented opportunities and impose further costs on their economies and current economic growth opportunities.

**Impact – lack of growth causes economic decline and great power war**

**Green & Schrage, 2009** - Center for Strategic and International Studies (CSIS) and Associate Professor at Georgetown University; CSIS Scholl Chair in International Business

.( Michael, Steven, Asia Times, March 26,  
[p.http://www.atimes.com/atimes/Asian\\_Economy/KC26Dk01.html](http://www.atimes.com/atimes/Asian_Economy/KC26Dk01.html)

However, **the Great Depression taught us that a downward global economic spiral can even have jarring impacts on great powers. It is no mere coincidence that the last great global economic downturn was followed by the most destructive war in human history. In the 1930s, economic desperation helped fuel autocratic regimes and protectionism in a downward economic-security death spiral that engulfed the world in conflict.** This spiral was aided by the preoccupation of the United States and other leading nations with economic troubles at home and insufficient attention to working with other powers to maintain stability abroad. Today's challenges are different, yet 1933's London Economic Conference, which failed to stop the drift toward deeper depression and world war, should be a cautionary tale for leaders heading to next month's London Group of 20 (G-20) meeting. There is no question the US must urgently act to address banking issues and to restart its economy. But the lessons of the past suggest that we will also have to keep an eye on those fragile threads in the international system that could begin to unravel if the financial crisis is not reversed early in the Barack Obama administration and realize that economics and security are intertwined in most of the critical challenges we face. A disillusioned rising power? Four areas in Asia merit particular attention, although so far the current financial crisis has not changed Asia's fundamental strategic picture. China is not replacing the US as regional hegemon, since the leadership in Beijing is too nervous about the political implications of the financial crisis at home to actually play a leading role in solving it internationally. Predictions that the US will be brought to its knees because China is the leading holder of US debt often miss key points. China's currency controls and full employment/export-oriented growth strategy give Beijing few choices other than buying US Treasury bills or harming its own economy. Rather than creating new rules or institutions in international finance, or reorienting the Chinese economy to generate greater long-term consumer demand at home, Chinese leaders are desperately clinging to the status quo (though Beijing deserves credit for short-term efforts to stimulate economic growth). The greater danger with China is not an eclipsing of US leadership, but instead the kind of shift in strategic orientation that happened to Japan after the Great Depression. Japan was arguably not a revisionist power before 1932 and sought instead to converge with the global economy through open trade and adoption of the gold standard. **The worldwide depression and protectionism of the 1930s devastated the newly exposed Japanese economy and contributed directly to militaristic and autarkic policies in Asia** as the Japanese

people reacted against what counted for globalization at the time. China today is similarly converging with the global economy, and many experts believe China needs at least 8% annual growth to sustain social stability. Realistic growth predictions for 2009 are closer to 5%. Veteran China hands were watching closely when millions of migrant workers returned to work after the Lunar New Year holiday last month to find factories closed and jobs gone. There were pockets of protests, but nationwide unrest seems unlikely this year, and Chinese leaders are working around the clock to ensure that it does not happen next year either. However, the economic slowdown has only just begun and nobody is certain how it will impact the social contract in China between the ruling communist party and the 1.3 billion Chinese who have come to see President Hu Jintao's call for "harmonious society" as inextricably linked to his promise of "peaceful development". If the Japanese example is any precedent, **a sustained economic slowdown has the potential to open a dangerous path from economic nationalism to strategic revisionism in China too.**

# Spending Bad DA 1nc shell

## Uniqueness – current agreement on budget means no new authorizations

**Sahadi 14** (Sahadi, Jeanne. "Deficit Continues to Drop Sharply." CNNMoney. Cable News Network, 04 Feb. 2014. Web. 18 July 2014. <<http://money.cnn.com/2014/02/04/news/economy/budget-outlook-deficits-cbo/>>. Jeanne Sahadi is a writer and reporter for CNN that writes about the economy and money. Fred).

The age of trillion-dollar deficits is well over. For now.¶ Thanks to a recovering economy, spending restraint and higher tax receipts, the Congressional Budget Office now projects the deficit for 2014 will be \$514 billion, or 3% of the size of the U.S. economy.¶ As a share of gross domestic product, that represents a nearly 27% drop from last year, and marks the smallest deficit since 2007.¶ In its latest budget and economic outlook, released Tuesday, the CBO also projected that the 2015 deficit would reach a low for the coming decade, at \$478 billion, or 2.6% of GDP, and then stay below 3% for a couple of years after that.

## Link – plan expensive unpredictable hit to the economy – insert specific link

### Internal link and impact – continued deficit spending harms economic growth

**Thornton 13**--Vice President and Economic Adviser [Daniel L. Thornton, "Does the Economy Need More Spending Now?", St. Louis Federal Reserve Bank, Economic Synopses, 2013, No. 24, <http://research.stlouisfed.org/publications/es/article/9892>, accessed 7/19/14]RMT

In addition to concerns about the extent to which **deficit spending** crowds out private spending is the fact that any **increase in output is temporary: Increased deficit spending can have no permanent effect on output.** In short, **government debt cannot be considered net wealth by all U.S. households. If it could be, then we could all become infinitely wealthy simply by incurring an infinite amount of debt.** Just as with fiat money, **you cannot simply print your way to long-run prosperity.** Assessing the benefits of additional deficit spending is further complicated by the likelihood **that deficit spending reduces economic growth. Additional deficit spending reduces economic growth by crowding out capital investment. A smaller stock of capital means less future output. This is an intergenerational transfer: People today get more output, while those in the future get less. It seems likely that such a loss of future output could easily swamp any (temporary) increase in current output.** Future output gains associated with a larger capital stock accrue over a long period of time, while the increased output associated with additional deficit spending is short-lived.

### Economic decline causes conflict, resource competition, terrorism and war

**Kemp, 10**, , [Director of Regional Strategic Programs at The Nixon Center, served in the White House under Ronald Reagan, special assistant to the president for national security affairs and senior director for Near East and South Asian affairs on the National Security Council Staff, Former Director, Middle East Arms Control Project at the Carnegie Endowment for International Peace, Geoffrey The East Moves West: India, China, and Asia's Growing Presence in the Middle East", p. 233-4)

The second scenario, called Mayhem and Chaos, is the opposite of the first scenario; everything that can go wrong does go wrong. **The world economic situation weakens** rather than strengthens, and **India, China, and Japan suffer a major reduction in their growth rates**, further weakening the global economy. As a result, **energy demand falls** and the price of fossil fuels plummets,

**leading to a financial crisis** for the energy-producing states, which are forced to cut back dramatically on expansion programs and social welfare. That in turn leads to **political unrest**; and **nurtures** different **radical groups**, including, but not limited to, Islamic extremists. The **internal stability** of some countries **is challenged**, and there are more “failed states.” Most serious is the **collapse of** the democratic government in **Pakistan** and its takeover by Muslim **extremists**, who then **take possession of** a large number of **nuclear weapons**. The **danger of war between India and Pakistan increases** significantly. **Iran**, always worried about an extremist Pakistan, expands and **weaponizes** its nuclear program. **That** further **enhances** nuclear **proliferation** in the Middle East, with Saudi Arabia, Turkey, and Egypt joining Israel and Iran as nuclear states. Under these circumstances, the potential for nuclear terrorism increases, and **the possibility of a nuclear terrorist attack** in either the Western world or in the oil-producing states **may lead to a further devastating collapse** of the world economic market, with a tsunami-like impact on stability. In this scenario, **major disruptions can be expected, with dire consequences for** two-thirds of **the planet’s population**.

# Growth Bad 1nc Frontline

## 1. US growth not occurring now – multiple headwinds

**Gordon, Department of Economics Northwester, 2012** (Robert, “IS U.S. ECONOMIC GROWTH OVER? FALTERING INNOVATION CONFRONTS THE SIX HEADWINDS” Working Paper 18315 August 2012 <http://www.nber.org/papers/w18315> accessed tm 7-16)

(1) Whatever the future of innovation, the U.S. economy still faces six daunting headwinds that will limit future potential growth and hold it below the pace which innovation would otherwise make possible. Recall that Figure 1, the graph with the blue and red step-like representation of growth rates of real per-capita GDP over long intervals, included a forecast. The final downward step assumed that growth in real GDP per capita would slow from the actual 1.8 percent rate recorded during 1987-2007, to a lower 1.4 percent rate.<sup>11</sup> This slowdown in growth already takes into account the first two headwinds. The “demographic dividend” is now in reverse motion. The original dividend was another one-time-only event, the movement of females into the labor force between 1965 and 1990, which raised hours per capita and allowed real per-capita real GDP to grow faster than output per hour. But now the baby-boomers are retiring, no longer included in the tally of total hours of work but still included in the population. Thus hours per capita are now declining, and any tendency for life expectancy to grow relative to the average retirement age will further augment this headwind. By definition, whenever hours per capita decline, then output per capita must grow more slowly than productivity. The second headwind already taken into account in the 2007-27 forecast is the plateau in educational attainment in the U.S. reached more than 20 years ago, as highlighted in the path-breaking work of Claudia Golden and Lawrence Katz (2008). The U.S. is steadily slipping down the international league tables in the percentage of its population of a given age which has completed higher education. This combines several problems. One is the cost disease in higher education, that is, the rapid increase in the price of college tuition relative to the prices of other goods. This cost inflation in turn leads to mounting student debt, which is increasingly distorting career choices and deterring low-income people from going to college at all. Not everybody gets a scholarship.

## 2. Increase economic complexity makes societal collapse inevitable and is unsustainable – only simplification and slow growth solves

**Hudgins, 2012**

(Coley Hudgins, author of ‘Resilient Family,’ “Complexity Theory and System Collapse,” march 12 2012 <http://www.theresilientfamily.com/2012/03/complexity-theory-and-system-collapse/> >:)

In Tainter’s and Rickards’ view, increasing complexity also creates hugely inefficient obstacles to improvements that would benefit all of society, and instead benefits only those parasitical government and financial elites who use complexity to perpetuate their own privileged class through rent-seeking — the accumulation of wealth through non-productive means. Think about it this way; the financialization of the global economy, and the explosion of government on a global scale are really all about harnessing complexity for the benefit of privileged classes. It’s why supranational, quasi-government organizations like the IMF, World Bank, G-20, and European Union have become so influential and self-perpetuating. It’s why increasing complexity in finance leads to the extraction of financial resources from society at large and directs them towards financial and government elites in the form of taxes, bailouts, usurious consumer fees, deceptive derivatives and bonuses. And it’s why, for instance, the IMF can get away with proposing even more complex global monetary instruments like SDR’s

(Special Drawing Rights) through what they argue is a process that “may be relatively fast and need not involve significant public support.” (Us hoi polloi needn’t worry our heads about such things I guess... It’s too complex after all, and in any case the IMF will decide for us.) In the end, it’s this **complexity** that **crushes citizens under the weight of rent extraction from a parasitical class. The end-result is an exponential increase in instability and an increasing possibility of collapse.** Summarizing Tainter, Rickards says **we now have three choices: simplification** – descaling society and returning the input-output ratio to a more sustainable level by, for instance, devolving political and economic power away from the self-perpetuating, parasitical elites in government and finance to more local and decentralized systems; **continued conquest – the effort to take resources from neighbors by force in order to provide new inputs (U.S. foreign policy); or collapse – a sudden, involuntary and chaotic form of simplification. It’s wishful thinking to believe that the highly complex global systems we have today will descale and simplify to more sustainable levels on their own.** But you can take individual action by simplifying your own life and decoupling to the extent possible from the complex and unstable systems on which most of us now depend. At its core, resiliency is really about the stability that simplicity makes possible. It’s indeed possible for individuals to weather instability and collapse, but it starts with individual action. Self-reliance, stability and simplicity are the best hedges in an increasingly complex and unstable world.

### **3. Turn - Unsustainable growth is the root cause of resource depletion, environmental collapse, and Third World poverty, and global military conflict.**

**Trainer 11** - Conjoint Lecturer in the School of Social Sciences, University of New South Wales, (Ted, “The radical implications of a zero growth economy”, Real-World Economics Review, issue no. 57, 2011, <http://www.paecon.net/PAERreview/issue57/Trainer57.pdf>) //RI

Thus **growth is a major cause of global problems.** This **“limits to growth” analysis is crucial if one is to understand the nature of the environmental problem, the Third World problem, resource depletion and armed conflict in the world.** Although there may also be other causal factors at work, all **these problems are directly and primarily due to the fact that there is far too much producing and consuming going on.** For instance, **we have an environment problem because far too many resources are being drawn out of nature and far too many wastes dumped back in, at rates technical advance cannot cut to sustainable levels. We have an impoverished and underdeveloped Third World because people in rich countries insist on taking most of the resources, including those in the Third World that should be being used by Third World people to meet their own needs. And how likely is it that we will ever have peace in the world if resources are very scarce and all cannot use them at the rate a few do now, yet all insist on getting richer and richer all the time without limit? If you insist on remaining affluent then you should arm yourselves heavily, you will need arms** if you want to continue to take far more than your fair share.

### **4. Turn -growth causes environmental collapse**

#### **Economic growth is the principal driver of environmental decline.**

Speth, 2013 (James Gustave Speth, “Growth Fetish: Five Reasons Why Prioritizing Growth is Bad Policy,” Huffington Post, September 20<sup>th</sup> 2013, [http://www.huffingtonpost.com/james-gustave-speth/growth-fetish-five-reason\\_b\\_4018166.html](http://www.huffingtonpost.com/james-gustave-speth/growth-fetish-five-reason_b_4018166.html), 7/17/14, LI

**Economic activity and its growth are the principal drivers of massive environmental decline.** In a remarkable passage of his environmental history of the twentieth century, Something New Under the Sun, historian J. R. McNeill writes that the “growth fetish” solidified its hold on imaginations and institutions in the twentieth century: “Communism aspired to become the universal creed of the twentieth century, but a more flexible and seductive religion succeeded where communism failed: the quest for economic growth. Capitalists, nationalists -- indeed almost everyone, communists included -- worshiped at this same altar because economic growth disguised a multitude of sins. ... Social, moral, and ecological ills were sustained in the interest of economic growth; indeed, adherents to the faith proposed that only more growth could resolve such ills. Economic growth became the indispensable ideology of the state nearly everywhere. **“The growth fetish, while on balance quite useful in a world with empty land, shoals of undisturbed fish, vast forests, and a robust ozone shield, helped create a more crowded and stressed one.** Despite the disappearance of ecological buffers and mounting real costs, ideological lock-in reigned in both capitalist and communist circles. ... The



overarching priority of economic growth was easily the most important idea of the twentieth century." The relationship between economic gains and environmental losses is a close one, as McNeill notes. **The economy consumes natural resources (both renewable and nonrenewable resources), occupies the land, and releases pollutants.** As the economy has grown, so have resource use and pollutants of great variety. As Paul Ekins says in Economic Growth and Environmental Sustainability, **"the sacrifice of the environment to economic growth. . . has unquestionably been a feature of economic development at least since the birth of industrialism."** And so it remains.

(read an impact if they don't claim this elsewhere)

## 5. Turn – diseases

**Growth and globalization guarantees disease spread -- makes transmission quicker and likelier**

**Gannon 10** – Chairman of the National Intelligence Council (John C., "The Global Infectious Disease Threat and Its Implications for the United States", <http://www.fas.org/irp/threat/nie99-17d.htm>) SP

**The increase in international air travel, trade, and tourism will dramatically increase the prospects that infectious disease pathogens such as influenza--and vectors such as mosquitoes and rodents--will spread quickly around the globe, often in less time than the incubation period of most diseases.** Earlier in the decade, for example, **a multidrug resistant strain of Streptococcus pneumoniae originating in Spain spread throughout the world in a matter of weeks, according to the director of WHO's infectious disease division. The cross-border movement of some 2 million people each day, including 1 million between developed and developing countries each week, and surging global trade ensure that travel and commerce will remain key factors in the spread of infectious diseases**

**Diseases lead to extinction**

**Fox 97**

C. William. Lieutenant COLONEL. 6/24/97. <http://se1.isn.ch/serviceengine/FileContent?serviceID=ISN&fileid=4341F68C-1AF1-FEB7-10D7-5EE127216D05&lng=en>.

HIV is a pandemic killer without a cure, and **viruses such as Ebola-Zaire are merely a plane ride away from the population centers of the developed world. Viruses like ebola, which are endemic to Africa, have the potential to inflict morbidity and mortality on a scale not seen in the world since the Black Plague epidemics of medieval Europe (which killed a full quarter of Europe's population in the 13th and 14th centuries.)**<sup>18</sup> **These diseases are not merely African problems, they present a real threat to mankind. They should be taken every bit as seriously as the concern for deliberate use of weapons of mass destruction.**

**6. Turn – water shortages -- Fast and unsustainable growth ensure water shortages and conflicts – steady growth solves**

**Speth, 8** – Rhodes Scholar @ Oxford University, Chairman of Council on Environmental Quality for Executive Office, Founder of World Resources Institute (Think-Tank), Led the Western Hemisphere Dialogue on Environment and Development, Administrator of United Nations Development Program, Dean of Yale School of Forestry and Environmental Studies, Leader of the President's Task Force on Global Resources and the Environment, Holds multiple awards—National Wildlife Federation's Recourse Defense Award and Lifetime Achievement Award of Environmental Law Institute, and Blue Planet Prize [James, "The Bridge at the Edge of the World"]

It has been said that there are alternative sources of energy, **but there are no alternatives to water. There are several dimensions to what has correctly been called the world water crisis.**<sup>40</sup> First, **there is the crisis of natural watercourses and their attendant wetlands. No natural areas have been as degraded by human activities as freshwater systems. Natural water courses and the vibrant life associated with them have been extensively affected by dams, dikes, diversions, stream channelization, wetland filling and other modifications,**

and, of course, **pollution**. Six percent of the world's major river basins have been severely or moderately fragmented by dams or other construction. Since 1950 the number of large dams has increased from 5,700 worldwide to more than 41,000. Much of this activity is done to secure access to the water, but **power production, flood control, navigation, and land reclamation have also been important factors**. As freshwater is diverted from natural sources, ecosystems dependent on that water suffer, including aquatic systems, wetlands, and forests. **About half the world's wetlands have been lost, and more than a fifth of known freshwater species have already been driven to extinction.**<sup>41</sup> The second crisis is the crisis of freshwater supply. **Human demand for water climbed sixfold in the twentieth century, and the trend continues today. Humanity now withdraws slightly over half of accessible freshwater, and water withdrawals could climb to 70 percent by 2025.**<sup>42</sup> Meeting the world's demands for freshwater is proving problematic. About 40 percent of the world's people already live in countries that are classified as "water stressed," meaning that already 20 to 40 percent of late pressures the available freshwater is being used by human societies. **Projections indicate that the percentage of people living in water-stressed countries could rise to 65 percent by 2025.**<sup>43</sup> **A large portion of freshwater withdrawals, about 70 percent, goes to agriculture.** Since 1960, acreage under irrigation has more than doubled. A special problem is occurring in India, China, and elsewhere in Asia where tens of millions of tube wells are depleting "fossil" ground waters. The New Scientist reports that "hundreds of millions of Indians may see their land turned to desert...,"<sup>44</sup> Overall, **according to a study by top water specialists from around the world, world demand for water could double by 2050.**<sup>45</sup> "At the worst," the New York Times reported, **"a deepening water crisis would fuel violent conflicts, dry up rivers and increase groundwater pollution.... It would also force the rural poor to clear ever-more grasslands and forests to grow food and leave many more people hungry."**<sup>46</sup> Last, there is the crisis of pollution. **Pollutants of all types are discharged into the world's waters in enormous quantities, reducing the capacities of bodies of water to support life in the water and to support human communities.** Contamination denies a large portion of the world's population access to clean water supplies. **About a billion people, a fifth of the world's population, lack clean drinking water;** 40 percent lack sanitary services. The World Health Organization calculates that each year about 1.6 million children die from diseases caused by unsafe drinking water and lack of water for sanitation and hygiene.<sup>47</sup> Water supply issues will become increasingly prevalent in the United States. Freshwater withdrawals per capita from surface and ground waters in the United States are twice that of the OECD (Organisation for Economic Co-operation and Development) as a whole. The Environmental Protection Agency estimates that **if current American water use remains constant at a hundred gallons per person per day, thirtysix states will face water shortages by 2013.** As a result, humanity's "first need" will soon be privatized. Investors are moving into a water related market that is estimated to be worth at least \$15<sup>5</sup> billion in the United States by 2010. "Water is a growth driver for as long and as far as the eye can see," a Goldman Sachs water analyst told the New York Times in 2006.<sup>48</sup>

## Water shortages will trigger nuclear war and extinction.

**NASCA 06** ["Water shortages – only a matter of time," National Association for Scientific and Cultural Appreciation, [http://www.nasca.org.uk/Strange\\_relics\\_/water/water.html](http://www.nasca.org.uk/Strange_relics_/water/water.html)]

**Water is one of the prime essentials for life as we know it.** The plain fact is - **no water, no life!** This becomes all the more worrying when we realise that **the world's supply of drinkable water will soon diminish quite rapidly.** In fact a recent report commissioned by the United Nations has emphasised that **by the year 2025 at least 66% of the world's population will be without an adequate water supply.** As a disaster in the making water shortage ranks in the top category. **Without water we are finished, and it is thus imperative that we protect the mechanism through which we derive our supply of this life giving fluid.** Unfortunately the exact opposite is the case. We are doing incalculable damage to the planet's capacity to generate water and this will have far ranging consequences for the not too distant future. The United Nations has warned that burning of fossil fuels is the prime cause of water shortage. While there may be other reasons such as increased solar activity it is clear that this is a situation over which we can exert a great deal of control. If not then the future will be very bleak indeed! Already the warning signs are there. The last year has seen devastating heatwaves in many parts of the world including the USA where the state of Texas experienced its worst drought on record. Elsewhere in the United States forest fires raged out of control, while other regions of the globe experienced drought conditions that were even more severe. Parts of Iran, Afghanistan, China and other neighbouring countries experienced their worst droughts on record. These conditions also extended throughout many parts of Africa and it is clear that if circumstances remain unchanged we are facing a disaster of epic proportions. Moreover it will be one for which there is no easy answer. **The spectre of a world water shortage evokes a truly frightening scenario.** In fact the United Nations warns that **disputes over water will become the prime source of conflict in the not too distant future. Where these shortages become ever more acute it could foreseeably lead to the brink of nuclear conflict.** On a lesser scale water, and the price of it, will acquire an importance somewhat like the current value placed on oil. The difference of course is that while oil is not vital for life, water most certainly is! It seems clear then that **in future years countries rich in water will enjoy an importance that perhaps they do not have today. In these circumstances power shifts are inevitable, and this will undoubtedly create its own strife and tension.** In the long term the implications do not look encouraging. It is a two edged sword. First the shortage of water, and then the increased stresses this will impose upon an already stressed world of politics. It means that **answers need to be found immediately. Answers that will** both ameliorate the damage to the environment, and also **find new sources of water for future**

consumption. If not, and the problem is left unresolved there will eventually come the day when we shall find ourselves with a nightmare situation for which there will be no obvious **answer**.

## Uniqueness

## **Uniqueness – state of the economy**

## US economic recovery - fragile

### **Recovery now – but incomplete**

**Reuters, July 16 2014** (“US economic recovery not yet complete, says Fed chairman”

<http://www.scmp.com/business/economy/article/1555074/us-economic-recovery-not-yet-complete-says-fed-chairman> accessed tm 7/16/14)

The United States' economic recovery remains incomplete, with a still-ailing job market and stagnant wages justifying loose monetary policy for the foreseeable future, Federal Reserve chairman Janet Yellen told a Senate committee yesterday. Yellen said that early signs of a pickup in inflation were not enough for the Fed to accelerate its plans for raising interest rates, a move currently expected in the middle of next year. That could change, with interest rates rising sooner and faster, if data showed labour markets improving more quickly than expected, she said. But as it stood, "although the economy continues to improve, the recovery is not yet complete", Yellen said in semi-annual testimony before the Senate banking committee, repeating her focus on lagging labour force participation and weak wage growth as key to any conclusions about the economy's health. "Too many Americans remain unemployed," she said.

## US economy improving – general

**Economy high- low unemployment, average wages, participation rate, stable credit rating**

### **Kruger 2014**

Daniel Kruger- Phd from Loyal University of Chicago- studies patterns of economics and mortality- “Treasures in **facing** Biggest Weekly Drop Since March After Jobs”- Bloomberg June 6, 2014-

<http://www.bloomberg.com/news/2014-06-06/treasures-advance-as-u-s-employment-growth-slows-in-may.html>

Treasures posted the biggest weekly drop in three months as employment gains in May pushed U.S. payrolls past their pre-recession peak and the jobless rate held at an almost six-year low. The U.S.'s AA+ credit rating was affirmed by Standard & Poor's, which cited the resiliency and diversity of the economy, almost three years after downgrading the nation for the first time. Yields on government securities in the euro-area fell to record lows a day after the European Central Bank cut interest rates, sparking a global warming crises rush for bonds. Federal Reserve Chair Janet Yellen said May 7 labor-market conditions “are still far from satisfactory.” “The overall economy from a job perspective is finally trending in a good way,” Jason Rogan, managing director of U.S. government trading at Guggenheim Securities, a New York-based brokerage for institutional investors. “From the Fed’s perspective, you’re starting to see very good job growth.” Benchmark 10-year yields rose less than one basis point to 2.59 percent as of 5 p.m. in New York after earlier dropping five basis points, based on Bloomberg Bond Trader prices. The price of the 2.5 percent security due in May 2024 dropped 1/32, or 31 cents per \$1,000 face value, to 99 7/32. Yields on the securities climbed 11 basis points this week, the most since the five days ended March 7, and rose as high as 2.64 percent yesterday, the most since May 13. Two-year note yields added two basis points to 0.40 percent, the highest level since May 13, gained three basis points this week for a second five-day gain. Credit Rating New York-based S&P said today in a statement that there is a less than one-in-three probability that the U.S.’s credit ranking will change in the next two years. The outlook on the rating is stable. Since the August 2011 downgrade from AAA, record budget deficits have shrunk, economic growth accelerated, the dollar rallied, stocks climbed to all-time highs and Treasuries strengthened their hold as the world’s preferred haven from turmoil. Still, S&P said a polarized policy-making environment and high general government debt and budget deficits constrain the ratings. “After the rating of the U.S. came under pressure because of the debt ceiling and government shut down, we actually saw a better cost of funding for the government,” David Coard, head of fixed-income trading in New York at Williams Capital Group, a brokerage for institutional investors. “We’re still the safe haven everybody seeks when there’s uncertainty in the world. I don’t think that’s changed.” ‘Continued Growth’ Two-year notes dropped as employers added 217,000 jobs last month, according to the Labor Department, after a revised 282,000 increase in April. That compared with the median forecast in a Bloomberg survey for a 215,000 employment increase. Estimates ranged from increases of 110,000 to 350,000. The unemployment rate was unchanged at 6.3 percent. May marked the fourth-straight month payrolls have increased at least 200,000, the first time that’s happened since September 1999 to January 2000. “We’ve seen continued growth within the labor market,” Sean Simko, who oversees \$8 billion at SEI Investments Co. in Oaks, Pennsylvania. “The sub-components continue to improve, but not to an extent that’s enough to shake up the bond market.” The participation rate, which indicates the share of working-age people in the labor force, held at 62.8 percent, matching the lowest since March 1978. Average hourly earnings rose 0.2 percent to \$24.38 in May from \$24.33 the prior month. They were up 2.1 percent over the past 12 months. Slow Process The increase in payrolls put total employment beyond the peak of 138.4 million reached one month after the start of the deepest recession since World War II. The number of employees on payrolls stood at almost 138.5 million last month, Labor Department data show. “It’s taken an extremely long period of time to gain back all of those jobs, much longer than any other cycle,” said Tom Porcelli, chief U.S. economist at RBC Capital Markets LLC. “It really drives home how painfully slow the process has been.” Benchmark U.S. 10-year notes yielded as much as 1.24 percentage points more than 10-year German bunds, the most since July 1999, helping fuel demand for Treasuries on a relative-value basis. The extra yield 10-year notes offer over their Group of Seven peers touched 0.69 percentage points, the highest since April 2010. ECB Measures Yields on Belgian, French, Irish, Italian and Spanish debt fell to all-time lows today after ECB President Mario Draghi yesterday cut the deposit rate to minus 0.1 percent and said the bank will introduce new “targeted” offerings of liquidity to banks to encourage them to lend money to the real economy. Officials will also start work on purchases of asset-backed securities, he said. “What’s going on is just the follow-through from Draghi and the ECB comments,” Michael Materasso, senior portfolio manager and co-chairman of the fixed-income policy committee at Franklin Templeton Investments in New York, which oversees \$347.5 billion of bonds. “There’s going to be further global liquidity, and that’s positive for lower rates.” Futures prices put the likelihood the Fed will start raising borrowing costs by its June 2015 at 44 percent, up from 42 percent yesterday, based on trading on the CME Group Inc.’s exchange. The chances

of a Fed increase are 60 percent by its July 2015 meeting. The Fed said after meeting on April 30 that it will keep the benchmark interest rate at almost zero for a "considerable time" after its bond-buying program ends. It reduced monthly debt purchases to \$45 billion, its fourth straight \$10 billion cut, and said further reductions in "measured steps" are likely. At that pace, the stimulus program intended to push down borrowing costs for companies and consumers would end in December.

## **The US economy recovering fragile – seasonal labor improvements prove**

**AFP 7/16/14** (AFP. "US Economy Growing across Nation: Fed Beige Book." Yahoo! News. Yahoo!, 16 July 2014. Web. 18 July 2014. <<http://news.yahoo.com/us-economy-growing-across-nation-fed-beige-book-201937742.html>>. Agence France-Presse is an international news agency headquartered in Paris. It is the oldest news agency in the world and one of the largest. Fred/Eric).

Washington (AFP) - The US economy has continued to shake off its winter sluggishness with all regions of the country seeing expansion, the Federal Reserve said in a report Wednesday.¶ Here's what Sen. Charles Schumer wants to tell Janet Yellen on Tuesday MarketWatch¶ Seven of the 12 regions surveyed recorded only "modest" growth, while five notched "moderate" growth, the Fed said in its latest Beige Book report, based on economic conditions in the six-week stretch before July 7.¶ The report is the second Beige Book in a row to find growth across the country and is the latest evidence the US economy is picking up steam after unusually cold weather depressed activity in the first quarter.¶ Auto sales, which have been on the upswing for more than a year, continued to stand out as particularly brisk support for the economy.¶ "Vehicle sales expanded in most districts, and auto contacts were optimistic about auto sales in the months ahead," the report said.¶ But the report's assessment of consumer spending, a key lifeblood of the US economy, was more subdued about the broader retail performance.¶ Non-auto retailers garnered "generally modest growth," with wet weather restraining activity in Chicago, but New York seeing a rise "due to pent-up demand as the negative effects from earlier adverse weather abated."¶ - Tightened labor marked -¶ The labor market tightened exceptionally in some pockets of the economy.¶ Several districts reported "some difficulty" finding staff for skilled positions, the report said, citing a shortage of truck drivers in Atlanta, Cleveland, Kansas City and Richmond.¶ Skilled construction workers were also in short supply in some parts of the country, while the energy boom kept labor markets tight in the Cleveland and Dallas regions.¶ But the pace of growth for the labor market at large was more tortoise than hare.¶ Wage pressures "remained modest" across most sectors, aside from a few skilled-labor categories, the report said.¶ The overall labor market "continued to improve," with all districts "reporting slight to moderate employment growth," the report said.¶ The report gave a mixed appraisal of the US housing market. Conditions "varied" across the country, with some regions suffering from weak demand.¶ Boston, New York, Chicago and St. Louis all reported that residential sales activity softened, the report said.¶ During testimony before a Senate panel Tuesday, Fed Chair Janet Yellen pointed to a stalling housing market with disappointing sales.¶ The report comes on the heels of a string of US labor data showing greater jobs growth and other data that reveals an improving –economy, but one that is by no means entering overdrive.¶ A Commerce Department report released Tuesday showed retail and food services sales rose just 0.2 percent in June.¶ "We see a modest economy, which is modestly getting better," JPMorgan Chase chief executive Jamie Dimon told a conference call this week.¶ Economic growth has been strong enough for the Fed to scale back its stimulus measures even as it continues to keep benchmark interest rates near zero.¶

## **Consumer confidence high – improving spending proves**

**Mutikani 7/15/14** (Mutikani, Lucia. "WRAPUP 3-U.S. Retail Sales, Manufacturing Data Point at Firming Economy." Reuters. Thomson Reuters, 15 July 2014. Web. 18 July 2014. <<http://www.reuters.com/article/2014/07/15/usa-economy-idUSL2N0PQ0K020140715?feedType=RSS&feedName=everything&virtualBrandChannel=11563>>. Lucia Mutikani is a journalist and writer for Reuters.com Fred).

WASHINGTON, July 15 (Reuters) - A gauge of U.S. consumer spending rose solidly in June, in the latest indication that the economy ended the second quarter on a stronger footing.¶ That momentum appeared to have carried into the third quarter, with another report on Tuesday showing factory activity in New York state expanded sharply



in July.¶ "This is not a fragile economy," said Chris Rupkey, chief financial economist at Bank of Tokyo-Mitsubishi UFJ in New York. **"The consumer continues to play their part in moving the economy forward."**¶ **Core sales, which strip out automobiles, gasoline, building materials and food services, increased 0.6 percent last month** after rising an upwardly revised 0.2 percent in May, the Commerce Department said.¶ Core sales, which correspond most closely with the consumer spending component of gross domestic product, were previously reported as being flat in May. Economists had expected them to rise 0.5 percent in June.¶ **The report added to signs of the economy's strengthening fundamentals, which could buoy optimism the recovery is on a self-sustaining path,** after output contracted sharply in the first quarter.¶ Federal Reserve Chair Janet Yellen told lawmakers the economy continued to improve, but noted that the recovery was not yet complete because of still-high unemployment.¶ Yellen, however, cautioned the U.S. central bank could raise interest rates sooner and more rapidly than currently envisioned if the labor market continued to improve faster than anticipated by policymakers.¶ Labor market conditions are firming, with the unemployment rate falling to a near six year-low of 6.1 percent in June and job growth exceeding 200,000 for a fifth straight month.¶ Prices for U.S. Treasury debt fell on the economic data and Yellen's interest rate comments, while the dollar gained against a basket of currencies. U.S. stocks traded lower.¶ June's gains and May's upward revision to core retail sales suggested a pickup in consumer spending in the second quarter after growing at its slowest pace in more than four years in the first quarter because of weak healthcare consumption.¶ Forecasting firm Macroeconomic Advisers raised its second-quarter GDP growth forecast by three-tenths of a percentage point to a 3.0 percent annual pace. Goldman Sachs upped its estimate for the quarter by two-tenths to a 3.4 percent rate.¶ UPBEAT OUTLOOK¶ A surprise drop in receipts for automobiles, however, held overall retail sales to a 0.2 percent increase in June after advancing 0.5 percent the prior month.¶ "Consumers will likely gain more confidence to spend as the job market improves and summer travel season hits full swing," said Randy Hopper, credit cards vice president at Navy Federal Credit Union in Vienna, Virginia.¶ "We are optimistic that the second half of the year will deliver stronger sales growth."¶ **From employment to manufacturing growing , the economy appears to be firing on nearly all cylinders, with even housing regaining its footing after slumping in late 2013 following a run-up in mortgage rates. Growth estimates for the second quarter top a 3.0 percent annual rate.¶ In another report, the New York Fed said its Empire State general business conditions index jumped to 25.60 this month, the highest since April 2010, from 19.28 in June.**

## **US Economy Growing – prices and recapitalization**

**Altman 14** (Roger Altman, July 17, 2014, "Surprise: The Economy isn't As Bad As You Think" <http://time.com/3000991/surprise-the-economy-isnt-as-bad-as-you-think/> , Access 7/18 AW)

**Our outlook shines compared with that of the rest of the industrialized world, as Europe and Japan are stagnant. The 2008 economic crisis and Great Recession forced widespread restructuring throughout the U.S. economy—not unlike a company gritting its teeth through a lifesaving bankruptcy. Manufacturing costs are down. The banking system has been recapitalized. The excess and abuse that defined the housing market are gone. And it's all being turbocharged by an energy boom nobody saw coming. It's not just economic trends that are looking up: crime rates, teen pregnancy and carbon emissions are down; public-education outcomes are improving dramatically; inflation in health care costs is at a half-century low. That points to something I did not foresee last year: that the social health of America seems to be mending. Americans may still feel discontented, but winter is finally over.**

## **US economy improving – manufacturing**

### **Manufacturing sector is growing – multiple warrants**

**Greiner 7/9/14** (Greiner, Bill. "A Look At Manufacturing Activity In The United States - Huffin' and Puffin'" Forbes. Forbes Magazine, 09 July 2014. Web. 18 July 2014.

<<http://www.forbes.com/sites/billgreiner/2014/07/09/a-look-at-manufacturing-activity-in-the-united-states-huffin-and-puffin/>>. Bill Greiner is the chief investment officer of Mariner Wealth Advisors and the former chief investment officer of Scout Investments. Fred).

For the last three years, manufacturing activity has been growing more rapidly than the overall U.S. economic GDP. This is the first time this has happened in more than 50 years. I believe the factors that have led to this oddity are sustainable and that manufacturing and overall industrial growth will probably continue to outpace overall GDP growth rates in the United States for some time.¶ Why is this the case?¶ Many manufacturing costs are becoming more level. Since the 1970s, many foreign countries have been leveraging their low cost-of-labor advantage to gain market share of the global manufacturing pie. It now appears that, in many cases, this cost advantage is becoming less acute.¶ Positive Long-Term Developments – Detail of the Factory Floor¶ Most manufacturing organizations can break their major cost structures down into the following broad categories:¶ Raw materials (including energy)¶ Cost of capital (interest expense)¶ Labor¶ Transportation¶ Inventory costs¶ Research and development¶ SG&A¶ Taxes/regulation¶ Smoke Stack¶ Below, I've provided a quick summary of what has changed over the last three to five years regarding many of these costs within the U.S. manufacturing complex.¶ Raw material costs in the United States are among the lowest in the world. This was not always the case. As of this year, the United States is the largest producer of not only natural gas, but oil. Largest in the world. Thanks to fracking activities, the United States has now surpassed Saudi Arabia as the world's #1 producer of oil. U.S. natural gas prices are among the lowest in the world. Due to the number of manufacturing processes that are very energy intense, these low prices serve as an advantage to U.S. manufacturers.¶ Cost of capital – Outside of Europe and Japan, the United States sports very low interest rates in relation to other less-developed countries.¶ Labor-to-capital investment decision – Perhaps the biggest development favoring U.S. manufacturers versus their foreign competitors is the outright structure of the factory floor. No longer a haven for wrench-turners and unskilled labor, the modern factory floor is staffed with industrial robots, computers and instrument precision tools. Fewer workers are needed in today's modern factory than in the past. Those who are working at the factory often need skills laborers of the past didn't require – and skills many foreign factory workers don't possess. These changes have reduced the headcount needed in many manufacturing operations. Automation and technological advancement has been put to work in the modern factory floor, significantly reducing the low cost-of-labor advantage of many less-developed manufacturing economies.¶ Transportation – Generally, it costs less to ship goods within the United States than bring them across the Pacific Ocean via ship. Consequently, many domestic manufacturers have a built-in advantage on transportation costs as compared to their foreign competition.

## **US economy improving – job growth**

### **Labor mobility improving job numbers – energy sector proves**

**Gillespie, June 25 2014** (Patrick Gillespie, “Energy boom fuels economic growth in Midwest states”

Island Packet <http://www.islandpacket.com/2014/06/25/3182034/energy-boom-fuels-economic-growth.html#storylink=cpy> accessed 7/16/14 tm)

**An analysis by McClatchy of employment numbers from the Bureau of Labor Statistics shows that when they’re overlapped with growth data, there’s a strong correlation between state-level growth and the dramatic increase in post-recession mining jobs through the Rockies and North Plains.**

**States with thriving energy sectors boost the local employment picture and draw people from other states who otherwise had few job opportunities,** experts say. Residents in North Dakota see the job boom on a daily basis.

### **Unemployment decreasing- payrolls have expanded more than 200,000 jobs for months**

#### **Lazarowitz 14**

Elizabeth Lazarowitz is Business and Money news editor for New York Times Daily- “U.S. economy recoups jobs lost during the recession after five years” New York Daily News- June 7, 2014

<http://www.nydailynews.com/news/national/u-s-economy-recoups-jobs-lost-recession-article-1.1820636>

Payrolls have expanded by more than 200,000 jobs for four months in a row. After a five-year struggle, the U.S. economy has finally recouped the jobs lost during the recession. Hiring grew steadily in May, with employers bringing on 217,000 workers, the Labor Department reported on Friday. The gain hoisted total U.S. employment past the previous peak reached in 2008, when the worst recession since the Great Depression was just beginning. The unemployment rate remained pinned at a near-six-year low of 6.3% in May as more jobless Americans began looking for work again, Friday’s report also showed. While April’s job increase was slightly smaller than previously thought, payrolls have expanded by more than 200,000 jobs for four months in a row. That’s the first time that has happened since 2000.

## **US economy improving – inflation in check**

**Inflation is coming now, but measures are in place to stop it.**

**Robb Jun 9**—MarketWatch [Greg, “Boston Fed president lays out cautious exit plan Relative calm in markets now may not last”, June 9, 2014, accessed July 18, 2014, [http://www.marketwatch.com/story/boston-fed-president-lays-out-cautious-exit-plan-2014-06-09?link=MW\\_pulse](http://www.marketwatch.com/story/boston-fed-president-lays-out-cautious-exit-plan-2014-06-09?link=MW_pulse)]RMT

Eric Rosengren, the **president of the Boston Fed, said that the “benign” market reaction to the gradual tapering of the central bank’s bond-buying program** this year **offered lessons to policymakers ne idea for a cautious exit might be for the Fed to slowly stop reinvesting in its mortgage portfolio instead of the current exit strategy that calls for stopping reinvestment all at once**, he said. **The Fed could announce it would reinvest all but a given percentage of securities on the balance sheet as they reach maturity and increase that percentage at every meeting**, assuming conditions allow, he said. The Fed has been trimming the size of the monthly bond purchases by \$10 billion at every meeting this year. **They are expected to continue this tapering at their policy meeting next week.** Rosengren’s remarks, **made in Guatemala**, are the final Fed speech before that meeting After swooning last year when the Fed started hinting at a tapering, **markets have taken the actual tapering in stride.** The yield **on 10-year Treasurys 10\_YEAR +0.73% have recently bounced off an 11-month low.** This might not last, Rosengren said. **“We should all acknowledge the possibility that this relative calm may be challenged in the future,” he said. “The eventual exit from very low interest rates around much of the globe will also be unprecedented**, and will thus hold challenges for communication and understanding,” he said. **Financial markets are playing close attention to the Fed’s exit strategy plans. The tapering is expected to end in the fourth quarter.** and Fed officials have said they don’t expect the first rate hike until next summer. **In his speech**, Rosengren said he won’t support a rate hike until the economy is “within one year” of reaching the central bank’s twin goals of full employment and 2% annual inflation. Rosengren, who is not a voting member of the **Fed committee this year, said an unemployment rate of 5.25% is his definition of full employment. The Fed’s latest projections for the economy released in March see a 5.2% unemployment rate in 2016.**

## **US economy improving – Consumer confidence US economy improving – consumer spending**

### **The US economy is growing – consumer confidence is all time high**

**Mutikani 6/24/14** (Mutikani, Lucia. "Consumer Confidence, Housing Data Bolster U.S. Growth Outlook." Reuters. Thomson Reuters, 24 June 2014. Web. 18 July 2014. <<http://www.reuters.com/article/2014/06/24/us-usa-economy-idUSKBN0EZ1KX20140624>>. Lucia Mutikani is a journalist and writer at Reuters.com Fred).

(Reuters) - U.S. consumer confidence jumped to its highest level in nearly 6-1/2 years in June and sales of new homes surged in May, the latest signs that the economy has regained momentum.¶ Growth is accelerating after crumbling in the first quarter, but Tuesday's robust reports likely exaggerate the strength. Nevertheless, they added to data on employment, factory and services sector activity in suggesting a sharp growth rebound.¶ "This is convincing evidence that the economy continues to expand," said Chris Rupkey, chief financial economist at Bank of Tokyo-Mitsubishi UFJ in New York. "It takes a lot of confidence to buy the biggest of big ticket items consumers ever face, buying a new home."¶ The Conference Board said its consumer confidence index rose to 85.2, the highest reading since January 2008, from 82.2 in May as households grew more optimistic about the labor market.¶ The reading, however, was at odds with another survey published last week, which showed consumer sentiment ticking down in early June. Still, economists said it was in line with other data showing an improvement in job market conditions.¶ In another report, the Commerce Department said new home sales vaulted 18.6 percent to a seasonally adjusted annual rate of 504,000 units, the highest level since May 2008.¶ The increase in sales was the biggest since January 1992. However, new homes sales data are notoriously volatile because they are drawn from a small sample, and last month's jump likely overstates the pace of improvement.¶ New home sales increased in all four regions. They hit a six-year high in the Midwest and were the highest since June 2008 in the South.

### **Consumer spending increasing – key to overall economy**

**Mitchell and Morath, 6/26/14** (Josh and Eric "U.S. Consumer Spending Rises on Higher Inflation" Dow Jones Business News, June 26, 2014, <http://www.nasdaq.com/article/us-consumer-spending-rises-on-higher-inflation-20140626-00383#ixzz37sIBtKdh>)

**The report offered the latest clues the recovery got back on track in the spring after a big contraction in economic output during the first quarter. Stronger job gains in recent months appear to be lifting household incomes, boosting overall economic growth.**

**But the weakness in consumer spending, if sustained, could restrain economic growth in the coming months. Consumer spending is the biggest piece of economic output in the U.S.**

**Broader trends portray an economy struggling to build momentum five years after the recession.** Personal spending was up just 3.7% in May from the prior year, and personal income was up 3.5%. During the 1990s and mid-2000s, spending and income growth typically exceeded 5% a year.

### **Consumer spending rebounding**

**Reuters, July 16 2014** ("US economic recovery not yet complete, says Fed chairman" <http://www.scmp.com/business/economy/article/1555074/us-economic-recovery-not-yet-complete-says-fed-chairman> accessed tm 7/16/14)

**A gauge of consumer spending rose last month, in the latest sign the economy ended the second quarter firmer.** The Department of Commerce said core sales, which exclude cars, petrol, building materials and food services, increased 0.6 per cent last month after rising a revised 0.2 per cent in May.

## **US economy improving – terrestrial energy**

### **Terrestrial energy growing – helping overall economic recovery**

**Gillespie, June 25 2014** (Patrick Gillespie, “Energy boom fuels economic growth in Midwest states”

Island Packet <http://www.islandpacket.com/2014/06/25/3182034/energy-boom-fuels-economic-growth.html#storylink=cpy> accessed 7/16/14 tm)

**While the national business outlook remains tepid, the energy sector is driving fast economic growth in some states.**

**A drilling boom for oil shale and natural gas has spurred prosperity throughout the middle of the United States. Despite having mostly smaller economies compared with coastal states, these states will continue growing for at least five more years, energy economists project, and they’ll have a positive impact on American jobs and the trade balance.**

“It’s a boomtown mentality, something the West hasn’t seen for a long time,” said Scott Anderson, senior vice president and chief economist at Bank of the West in San Francisco. “You start to think back to the gold rush days in California. You really do see that middle strip of the country outperforming the coasts for a change.”

**In 2010, East Coast states made up 38 percent of the nation’s gross domestic product, the sum of all goods and services produced. Last year, the East Coast produced 36 percent of the American GDP in dollars, while Midwest states increased by 1 percentage point to 14 percent of the national total.**

That’s according to an analysis by McClatchy of a report published earlier in June by the Bureau of Economic Analysis, part of the Commerce Department.

North Dakota’s gross domestic product grew 9.7 percent from 2012 to 2013, the most of any state and much higher than the national growth rate over the same period of 1.8 percent, according to the bureau’s report.

### **State GDP growth expanding – energy**

**Gillespie, June 25 2014** (Patrick Gillespie, “Energy boom fuels economic growth in Midwest states”

Island Packet <http://www.islandpacket.com/2014/06/25/3182034/energy-boom-fuels-economic-growth.html#storylink=cpy> accessed 7/16/14 tm)

**Wyoming, Colorado, Idaho, Montana, Texas, Oklahoma, Utah, North Dakota and South Dakota all recorded GDP growth of 3 percent or higher last year, well above many of the coastal states,** according to the Bureau of Economic Analysis report. They also saw an upward tick in oil-and-gas drilling jobs after the recession ended.

**“For the states with the fastest-growing GDP, a lot of that growth can be attributed to the energy sector,”** said Michael Wolf, an economist at Wells Fargo Securities in Charlotte, N.C. “Assuming that prices stay relatively stable, I think we can expect continued growth.”

## Global Economy U- improving

### **Projections show US and developing world improved economy**

**The Star News 7/18** (The Star News. "Schroders Sees World Economy Continuing to Recover."

Thestaronline.com. N.p., 18 July 2014. Web. 18 July 2014.

<[http%3A%2F%2Fwww.thestar.com.my%2FBusiness%2FBusiness-](http://3A%2F%2Fwww.thestar.com.my%2FBusiness%2FBusiness-News%2F2014%2F07%2F18%2FSchroders-sees-world-economy-continuing-to-recover%2F)

[News%2F2014%2F07%2F18%2FSchroders-sees-world-economy-continuing-to-recover%2F](http://3A%2F%2Fwww.thestar.com.my%2FBusiness%2FBusiness-News%2F2014%2F07%2F18%2FSchroders-sees-world-economy-continuing-to-recover%2F)>. The Star News is a news company based in Washington that reports on daily events. There are a number of branches throughout the US. Fred).

KUALA LUMPUR: Schroders forecasts the world economy to continue to recover with the growth in the developed countries spreading to the emerging markets as trade picks up.¶ In its "Global Market Perspective" report, Schroders also said the environment remains positive for markets in the second half of the year.¶ "The headwinds which have held back activity last year are expected to abate somewhat and allow demand to lift. The upturn is primarily led by the developed economies, the US and Europe, whilst the emerging economies experience a more modest improvement," it said.¶ Among the highlights of the report, while focusing on equities, it continued to favour the US but turned more negative on its assessment on UK equities.¶ Schroders downgraded European equities to neutral while for Japan, it has switched to positive due to the prospect of greater flows towards this market.¶ As for the Emerging Markets (EM) equities, it has become positive as valuations are more attractive.¶ Schroders anticipated upward pressure on US rates as the labour market continues to tighten and inflationary pressures build.¶ "Corporate profits may than come under pressure as wages pick up. Market reaction will depend on how the Fed responds and we see a strong case for the higher interest rates in the US," it said.¶ It added for other countries, their monetary policy was expected to remain easy with the European Central Bank (ECB) and Bank of Japan looking to stimulate growth and head off deflation.¶ "Notwithstanding these challenges, the environment remains positive for markets in the second half of the year.¶ "However, as valuations push higher we are examining our stance on risk assets. Equities continue to look attractive, but we see scope for some profit taking and a rotation towards those markets which have lagged the rally," it said.¶ ECONOMY¶ On the US economy, Schroders pointed out despite the softness of the first quarter where US GDP fell at an annual rate of 2.9%, the recent improvement in the data suggests the US could experience a sharp rebound in the second quarter.¶ In the UK, it expected the recovery to continue, supported by the strong momentum in the housing market.¶ However, the growth profile for the Eurozone and Japan is more subdued with activity in Japan likely to be held back by the consumption tax hike.¶ For EM, it pointed out the growth outlook faces domestic issues along with the prospective tightening of US monetary policy weighing on the region.¶ "Looking ahead, we see stability rather than a massive deterioration, with the global recovery providing support against weaker domestic fundamentals.¶ "However, we need to become more confident on activity in the large economies like China and Brazil before the emerging markets can return to a stronger growth path," it said.¶ Central bank policy¶ Schroders said for the rest of the year, it expected major developed central banks to keep interest rates pinned to the floor but policy de-synchronisation was expected to set in motion next year.¶ It said the US Federal Reserve was expected to complete tapering of asset purchases by October this year with the first rate rise forecast in June next year.¶ In the UK, the Bank of England (BoE) was assumed to start increasing rates in February 2015. However, the Bank of Japan (BoJ) is expected to step up asset purchases later in the year.¶ In the Eurozone, monetary conditions were set to remain loose with the ECB providing targeted long-term financing operations (TLTROs) with the prospect of asset-backed security (ABS) purchases.¶ For emerging central banks, particularly the BRICs (Brazil, Russia, India and China), further rate hikes expected for Brazil, but a likelihood of monetary easing in Russia, China and India in 2015.¶ IMPLICATIONS FOR THE MARKET¶ Schroders said equities remained its preferred asset class despite valuations generally looking less compelling following a period of strong performance.¶ "We still believe that equities remain well-supported in the medium-term particularly as earnings growth comes through on the back of the global recovery," it said.¶ Although in the near-term, there is limited room for re-rating given the market has priced in a benign environment. It acknowledged there was the risk of greater volatility driven by the normalisation of the macro environment and the impact on rate expectations.¶ EQUITIES¶ Within equities, it continued to favour the US as it was confident that the domestic recovery will continue, helping companies to deliver further earnings growth and maintain high profit margins.



## Global economic numbers show improvement – need commitment to growth

### OECD 14

“Global economy recovering at moderate pace but more risks ahead, says OECD” January 9, 2014  
<http://www.oecd.org/newsroom/global-economy-recovering-at-moderate-pace-but-more-risks-ahead.htm>

The recovery is real, but at a slow speed, and there may be turbulence on the horizon,” OECD Secretary-General Angel Gurría said during the Outlook launch in Paris. “There is a risk of another bout of brinkmanship in the US, and there is also a risk that tapering of asset purchases by the US Federal Reserve could bring a renewed bout of instability. The exit from non-conventional monetary policy will be challenging, but so will action to prevent another flare-up in the euro area and to ensure that Japan’s growth prospects and fiscal targets are achieved,” Mr Gurría said (Read the full speech). GDP growth across the 34-member OECD is projected to accelerate from this year’s 1.2% rate to a 2.3% rate in 2014 and a 2.7% rate in 2015, according to the Outlook. The world economy, by contrast, will grow at a 2.7% rate this year, before accelerating to a 3.6% rate in 2014 and 3.9% in 2015. The pace of the global recovery is weaker than forecast last May, largely as a result of the worsened outlook for some emerging economies. Growth in the United States is projected at a 2.9% rate in 2014 and a 3.4% rate in 2015. In Japan, GDP is expected to drop to a 1.5% growth rate in 2014 and a 1% rate in 2015. The euro area is expected to witness a gradual recovery, with growth of 1% in 2014 and 1.6% in 2015. Growth has begun picking up in China but will remain weaker than previously projected in most other major emerging market economies. A group of emerging OECD member countries – Chile, Turkey, Mexico, Korea and Israel – will continue out-pacing growth in other advanced economies. The Outlook draws attention to a range of downside risks in this recovery, which is still weak by past standards. It points to a worrisome slowdown in world trade growth, in foreign direct investment flows and in fixed investment, as well as continuation of stubbornly high unemployment, particularly in Europe, where it is only expected to fall below 12% by the end of 2015. The OECD says US monetary policy should remain accommodative, while proposing a gradual winding down of asset purchases by the Federal Reserve, to limit impacts on vulnerable emerging-market economies. It calls for an end to fiscal deadlock in the United States, through the abolition of the nominal debt ceiling and implementation of a co-ordinated medium-term fiscal plan. Welcoming the recent European Central Bank rate cut, the OECD said further easing may be required if deflation risks intensify. It called for rigorous implementation of the planned asset quality review and stress tests of euro area banks, followed by bank re-capitalisation, where needed, and further progress toward banking union. Japan is encouraged to continue implementation of the so-called “three arrows” of Abenomics, as part of the decisive action needed to exit deflation, put growth on a sustainable path, and meet the country’s long-term fiscal challenges. “Growth since the global crisis has been uneven and hesitant, while job creation has been even more disappointing,” OECD Chief Economist Pier Carlo Padoan said during the Outlook presentation. “Clear and credible strategies are needed for how jobs and growth will be created and public finances restored. This will require a strong commitment to structural reforms in advanced and emerging market economies alike,” Mr Padoan said.

**US economy not improving**

## US economy not improving – laundry list

### **US economy still low- housing and long term unemployment**

#### **Kohl 14**

David Kohl is a professor in finance, business management and banking at Virginia Tech- “Economic indicators and confusing signals” Corn and Soybean Digest Road Warrior- May 27, 2014

<http://cornandsoybeandigest.com/blog/economic-indicators-and-confusing-signals>

The U.S. economy is showing mixed signals. The lead economic index (LEI) which foretells the future of the economy has been increasing in recent months, most recently up 0.4%, which is bullish for the economy. Sixty percent of the factors that make up the LEI are exhibiting positive signs. The purchasing manager index (PMI) also illustrates a positive growth oriented economy for the next few months. The readings have consistently been above 50, a metric that suggests an expanding economy. Another positive sign is 78.6% factory capacity utilization. For comparison, at the height of the great economic recession of 2009, this figure dropped to 68%, the lowest ever recorded. Confusing Signals Despite the forward-looking good news, housing, which is a pivotal part of the economy, is still struggling. With one in seven jobs in America tied to housing, this engine of the economy is improving at a modest pace. Ideally, housing starts range between 1.1 million and 1.5 million annually. In recent months, this metric has been in the 900,000 range, and it increased to 1.072 million in April. Reasons for the struggle include higher mortgage rates, students with over \$1 trillion of student loan debt collectively, increased regulation of mortgage lenders, the desire to rent rather than own a home, and affordability of housing with flattening or reduced wage scales. Another area of the economy that is struggling is unemployment. While the rate has declined to 6.3%, the U-6 unemployment rate which includes the long-term unemployed, discouraged workers and people mismatched in the workforce is at 12.3%. While many jobs are available, the particular skill sets needed may not be available, creating a gap. This is particularly true in the agriculture industry with more use of technology and innovation, which requires a highly skilled agricultural workforce. Oil prices remain stubbornly high impacting consumer purchases. Copper prices, a bellwether of world economic growth and inflation, have declined by approximately 25% year-over-year. Yes, first quarter gross domestic product (GDP) growth was a paltry 0.1%. Everyone he is blaming the winter weather, but there may be other factors involved.

## US economy not improving – unemployment high

**Jobs numbers inaccurate – higher rate than reported means economy not so great**

### **Brody 14**

Rachel Brody work with the US and New Report- “Views You Can Use: (Mostly) Good News on Jobs” - US News- July 3, 2014 <http://www.usnews.com/opinion/articles/2014/07/03/mostly-good-news-on-june-jobs-and-unemployment-numbers>

Many cheered Thursday's early jobs report, which handily beat out economists' expectations. The U.S. added 288,000 jobs in June, about 73,000 more jobs than were originally predicted, and the unemployment rate fell to 6.1 percent, its lowest rate since 2008. Quartz's Matt Phillips welcomed the news. “Actual progress! We're 410,000 jobs into a real labor market expansion,” he tweeted. Not only is overall unemployment down but long-term unemployment is dropping as well, he noted. (The Wall Street Journal reports it's down 1.2 million people from 2013.) Wage growth, however, isn't looking too hot. In other words, “It still ain't easy to get a raise,” Phillips tweeted. “This isn't one of those months when some good headline data is undermined by the fine print,” writes the New York Times' Neil Irwin. “The fine print in June was pretty good, too.” But Irwin warns us not to celebrate quite yet. The gains are real, he writes, but we've also seen this before: “If this halting, sluggish recovery has taught us anything, it is to not let our assessments of the economy be driven by hope, but rather by sustained and credible improvement in a wide range of economic data.” Fox News Channel wasn't exactly bowled over by the U.S. Labor Department's report. “The unemployment rate [is] falling 0.2% to 6.1%,” reported a Fox anchor. “But with many out of the labor market, we need to point out the real unemployment rate stands at 12.1%.” That last number — the U-6 rate — is sometimes used by economists as the broadest calculation of unemployment in the U.S. The rate combines the unemployed, the underemployed (e.g. a part-time worker who is looking for a full-time job) and “discouraged” workers, those who've given up the job search. Despite being higher than the unemployment rate, the U-6 rate is still at a six-year low.

## **US economy not improving – deficit spending high**

### **Budget deficit high – key to international perception of the dollar**

**Hunter 7/13** (Hunter, Greg. "Budget Deficit Exploding Out of Control -John Williams." *Greg Hunters USAWatchdog*. N.p., 13 July 2014. Web. 18 July 2014. <<http://usawatchdog.com/budget-deficit-exploding-out-of-control-john-williams/>>. Greg Hunter is a writer for usawatchdogs.com Fred).

Economist John Williams says don't be fooled by the new highs on the Dow. **Williams contends, "The economy is still in serious trouble. The banking system is still in serious trouble. The budget deficit is exploding out of control."** Williams thinks the ongoing banking crisis in Cyprus has global implications. Williams says, "You have a precedence set in Cyprus that they can seize the funds. They will not guarantee all deposits. If that's the case, you may have a much worse crisis than you had back in 2008." Williams adds, "The big problem is the government is insolvent in the long term." Williams says the U.S. dollar could start selling off in May because of a deadlock in Congress on the budget. **Williams predicts, "The global markets are looking for the U.S. to address its long term sovereign solvency issues. That's not going to happen. . . . In response, it's going to be off to the races with a dollar sell-off. That could be the trigger for the early stages of hyperinflation."** Join Greg Hunter as he goes One-on-One with **John Williams of Shadowstats.com.**

## US economy not improving – consumer spending low

### **Low consumer spending – wages not kept up with increased cost**

**Shah 13** (Shah, Neil. "Stagnant Wages Are Crimping Economic Growth." The Wall Street Journal. Dow Jones & Company, 25 Aug. 2013. Web. 18 July 2014.

<<http://online.wsj.com/news/articles/SB10001424127887323980604579028822725730720>>. Neil Shah covers the U.S. economy and demographics from The Wall Street Journal's New York office. Fred).

Americans are spending enough to keep the economy rolling, but don't expect them to splurge unless their paychecks start to grow.

¶ Four years into the economic recovery, U.S. workers' pay still isn't even keeping up with inflation.

The average hourly pay for a nongovernment, non-supervisory worker, adjusted for price

increases, declined to \$8.77 last month from \$8.85 at the end of the recession in June 2009, Labor Department data show.

¶ Stagnant wages erode the spending power of consumers. That means it is harder for them to make purchases

ranging from refrigerators to restaurant meals that account for most of the nation's economic growth.

¶ Economists blame three factors:¶ Economic growth remains sluggish, advancing at a seasonally adjusted annual pace of less than 2% for three

straight quarters—below the prerecession average of 3.5%. That effectively has put a lid on inflation, which has been near or below the 2%

level the Federal Reserve considers healthy for the economy. With demand for labor low, prices not rising fast and 11.5 million unemployed

searching for work, employers aren't under pressure to raise wages to retain or attract workers.¶ Enlarge Image¶ Businesses are changing how

they manage payrolls. Economists at the Federal Reserve Bank of San Francisco in a recent paper said that, in the past, companies cut wages

when the economy struggled and raised them amid expansions. But in the past three recessions since 1986—and especially the 2007-2009

downturn—companies minimized wage cuts and instead let workers go to keep remaining workers happy. As a result, to compensate for the

wage cuts that never were made, businesses now may be capping wage growth. "As the economy recovers, pent-up wage cuts will probably

continue to slow wage growth long after the unemployment rate has returned to more normal levels," the researchers said.¶ Globalization

continues to pressure wages. Thanks to new technologies, Americans are increasingly competing with workers world-wide. "We are

on a long-term adjustment, as China, in particular, but all developing countries, get their wages closer to ours," said Richard Freeman, an

economist at Harvard University. According to Boston Consulting Group, there will be only a roughly 10% cost difference between the U.S. and

China in making products such as machinery, furniture and plastics by 2015.

## US economy not improving – productivity shrinking

### **Productivity key to global economy – jobs don't matter if not productive**

#### **Giles 14**

Chris Giles has been the economics editor of the Financial Times since 2004. He studies national economic trends. "Productivity crisis haunts global economy" - Financial Times, Global Economy January 14, 2014  
<http://www.ft.com/cms/s/0/c0ea2a82-7d18-11e3-a579-00144feabdc0.html#axzz37pz7ugBu>

High quality global journalism requires investment. A productivity crisis is stalking the global economy with most countries failing last year to improve their overall efficiency for the first time in decades. In a sign that innovation might be stalling in the face of weak demand, the Conference Board, a think-tank, said a "dramatic" result of the 2013 figures was a decline in the world's ability to turn labour and capital resources into goods and services. Productivity growth is the most important ingredient for raising prosperity in rich and poor countries alike. If overall productivity growth disappears in the years ahead, it will dash hopes that rich countries can improve their population's living standards and that emerging economies can catch up with the advanced world. The Conference Board said: "This stalling appears to be the result of slowing demand in recent years, which caused a drop in productive use of resources that is possibly related to a combination of market rigidities and stagnating innovation." The failure of overall efficiency – known to economists as total factor productivity – to grow in 2013 results from slower economic growth in emerging economies alongside continued rapid increases in capital used and labour inputs. Labour productivity growth also slowed for the third consecutive year. The decline in total factor productivity continues a trend of recent years in which the remarkable rise in the efficiency of emerging markets has slowed and in advanced economies it has declined. While the measures relate to whole economies, companies at the sharp end of the productivity slowdown have redoubled efforts to improve the situation. The world's biggest miners, including BHP Billiton and Rio Tinto for example, are among those trying to reverse a worrying decline in productivity by moving away from expensive investment in new projects to maximising returns from existing operations. Bart van Ark, chief economist of the Conference Board, said it was not clear whether the decline in productivity growth was the result of weak demand reducing the output of economies, or that the remarkable consumer innovations are not actually improving the efficiency of economic activity. The first idea relates to the "secular stagnation" school of thinking made prominent last year by Lawrence Summers, the former US treasury secretary, while concerns about the usefulness of modern technology in improving productive efficiency have been raised by Prof Robert Gordon, of Northwestern University. "It is probably a bit of both," said Mr van Ark, adding, "the truth is somewhere in the middle." The Conference Board's annual analysis of productivity uses the latest data to estimate economic growth in all countries, the increase in hours worked and the deployment of additional capital to estimate the efficiency of individual economies. Globally, it found that labour productivity growth declined from 1.8 per cent in 2012 to 1.7 per cent in 2013, having been as high as 3.9 per cent in 2010. Total factor productivity dipped 0.1 per cent. For the US it found that productivity gains of the early years of the crisis continued to be elusive in 2013, with labour productivity growth stable at 0.9 per cent in 2013. The US trends were, however, better than those in Europe, which has seen extremely weak productivity growth alongside relatively muted unemployment in most large economies with the exception of Spain, where joblessness soared. Labour productivity grew 0.4 per cent in 2013, having fallen 0.1 per cent in 2012. Mr van Ark said Europe's problem in achieving more efficiency from its labour force stemmed from structural rigidities. "We really see the need for more people to move quickly from one company to another and where [innovative] firms do not see huge risks in taking on these people." Emerging economies saw rates of growth of productivity fall from extraordinarily rapid rates, even though the rate of growth at 3.3 per cent was still much higher than in advanced economies. For China, the Conference Board said that, while "the statistical information for the latest years is sketchy, the indications are that sustained investment growth in China has not been accompanied by the efficiency gains (measured by total factor productivity growth) similar to those of the previous decade". Mr van Ark said he expected productivity growth to pick up in 2014 as demand conditions improved, leading to faster growth of outputs than inputs, but the relatively weak productivity growth outlook to persist

## **Uniqueness – link uniqueness**



## Environmental investment now

### **Obama is pushing for clean tech now**

**Meltzer 14**--Fellow in Global Economy and Development, Brookings Institution, and adjunct professor at the Johns Hopkins School for Advanced International Studies. This article follows in part upon the author's earlier article. Joshua Meltzer, [Joshua, "A CARBON TAX AS A DRIVER OF GREEN TECHNOLOGY INNOVATION AND THE IMPLICATIONS FOR INTERNATIONAL TRADE", ALLIANCE21, <http://www.alliance21.org.au/about/people/joshua-meltzer>, Apr. 12, 2014, accessed 7/18/14]RMT

The EPA finding that CO<sub>2</sub> from mobile sources endangers public health and welfare triggered a requirement under the Clean Air Act (CAA) to regulate CO<sub>2</sub> emissions from stationary sources. 91 EPA has proposed that as part of the permitting process for a proposal to construct or operate new and modified stationary sources emitting at least 75,000 tons per year of CO<sub>2</sub> emissions, there must be a demonstration that the applicant is using the best available control technology (BACT) to limit its emissions. 92 What constitutes BACT would be assessed on a case-by-case basis, taking into account the commercial viability and availability of the technologies for reducing GHG emissions. 93 In the near term, BACT is unlikely to require adopting technologies such as carbon capture and sequestration that have yet to be technically and economically proven and instead will drive a transition toward energy efficient technologies. Most recently, in September 2013, **the EPA proposed new source performance standards (NSPS) for CO<sub>2</sub> emissions from fossil fuel-fired power plants with separate standards for natural gas and coal-fired units.** 94 Under these proposed standards, **CO<sub>2</sub> emissions from new (and modified) fossil fuel-fired plants will be limited to 1,100lb CO<sub>2</sub> per megawatt-hour (CO<sub>2</sub>/MWh).** 95 And **as coal plants emit on average 1,800lb CO<sub>2</sub>/MWh, only coal plants with (at least partial) CCS will meet this standard.** 96 Moreover, **regulating new sources of CO<sub>2</sub> emissions requires the EPA to also regulate existing sources.** 97 **President Obama has directed EPA to develop standards for existing sources of CO<sub>2</sub> by 2016.** 98 As this discussion demonstrates, **most U.S. climate change policies involve technology-push measures.** The **EIA table above illustrates the United States' bias toward technology-push measures and includes U.S. spending on R&D, loan guarantees, and tax credits for suppliers of renewable energy projects.** Additionally, the increased fuel efficiency standards that apply to vehicle manufacturers and proposed new CO standards for stationary sources also operate as technology-push incentives. 2 That said, not all U.S. climate change policy seeks to encourage the innovation and production of green technologies through supply-side policies. There are some demand-pull measures though these are piecemeal and mostly at the state level, such as California's cap and trade system. 99 For the reasons outlined above, **a more comprehensive demand-pull measure such as a federal carbon tax would, in addition to reflecting the environmental externalities of carbon, induce greater innovation and thereby complement the range of technology-push measures already in place.**

## Environmental regulations now

### **Environmental regulations exist now – clean water act**

#### **Hart and Cavanagh, 2012**

(Environmental Standards Give the United States an Edge Over China: *Chinese Citizens Still Facing Health Threats We Addressed Decades Ago*, Melanie Hart and Jeffrey Cavanagh, April 20, 2012 Melanie Hart is a Director for Chinese Energy and Climate Policy at American Progress. She focuses on China's science and technology development policies for energy innovation as well as its domestic energy efficiency program, environmental regulatory regime, and domestic and international responses to global climate change.

**Environmental pollution is a negative byproduct of some production processes, particularly those processes that use older, less efficient technology. In a market economy,** companies always have a natural profit incentive to make money—the more they make, the more executives and employees get to keep and spend on themselves—but **they do not always have a natural incentive to protect the environment by switching from outdated, dirty technologies to cleaner, more sustainable versions.** That is because environmental costs are born by the local community, and the local community has no say over company production decisions. One way we can ensure companies take environmental costs into account is to put a price on carbon. Another is to use government regulations. **Thus far, the United States has not succeeded in rolling out a nationwide carbon pricing system, but we do have a nationwide environmental regulatory system.** To be effective, that type of system needs three critical components. First, **we need standards that stipulate the amounts and types of pollutants we are willing to accept in our air, water, soil, food, and consumer products** such as children's toys. Ideally, these standards should be based on public health impacts rather than on what industry representatives claim they are willing and able to meet. **The U.S. Clean Air Act gets this right. Under the 1970 Clean Air Act, the Environmental Protection Agency set strict standards for six of the worst pollutants based on what scientific evidence tells us we need to do to protect infants, children, pregnant women, and other sensitive individuals.** Congress passed amendments to the act in 1990 that called on the agency to reduce other hazardous pollutants, and in December 2011 the agency issued new standards for mercury pollution due to mounting evidence that mercury is accumulating in watersheds and fish, building up in human bodies due to fish consumption, and inhibiting brain development for children exposed to excessive mercury in the womb or at a young age.

### **No new regulations – GOP political opposition**

**Wilson and Devaney 14**---political analyst, contributory “the hill” [Megan and Tim, “K Street eyes spending bills to stop Obama”, *The Hill*, 7/17/14 <http://thehill.com/business-a-lobbying/business-a-lobbying/212522-k-street-eyes-spending-bills-to-stop-obama#ixzz37qVFN100>, accessed 7/18/14 ]RMT

Republican **lawmakers have included language to block funding for a host of new rules in appropriations bills, and many of the provisions could survive in an overarching omnibus bill funding the government later this year. Legislation passed by the House Appropriations Committee would nix**

or postpone controversial regulations on everything from school nutrition standards to the disclosure of corporate political giving to carbon emissions from power plants. The agriculture appropriations bill even aims to ban horsemeat by prohibiting federal dollars from being used to inspect facilities that slaughter the animals. With the Senate having failed to pass any appropriations bills, a stopgap funding effort — known as a continuing resolution — appears likely to fund the government until after the election. “Putting new items in a CR [continuing resolution] is something that is difficult to achieve,” said one former aide to both the House and Senate Appropriations panels. “If there is a really strong argument for including something in a CR, they will, but it's a hard hill to climb. Appropriators like clean bills.” After the stopgap bill, the real action on a final budget deal will begin. With the help of high-powered K Street lobbyists, industry groups will be pushing Congress to address their pet issue in a spending agreement. Provisions that were already included in the appropriations bills could be revived at that stage — but only if both parties agree to them. Democrats are unlikely to accept many of the provisions from the House appropriations bills, including the ones that aim to stop the Environmental Protection Agency’s limits on carbon emissions — rules that are the centerpiece of President Obama’s second-term agenda. Republicans are also fighting an EPA rule they say unduly expands the EPA’s authority over streams and other smaller bodies of water. Farmers and ranchers have said the rule could be devastating to their businesses. “This is a way to limit the EPA’s definition of what constitute the Waters of the United States,” said Don Parrish, director of regulations at the American Farm Bureau Federation, who said he has lobbied both Republicans and Democrats on the issue. “We see this as a huge issue and something that will have significant implications on farmers and ranchers,” he said.

## **US abandons stricter air pollution rules – limiting regulations**

Broder (John M. Broder, reporter on energy and environment issues for the Washington bureau of The New York Times) ‘11

[“Obama Administration Abandons Stricter Air-Quality Rules” NYT Environment, 10/2/11, [http://www.nytimes.com/2011/09/03/science/earth/03air.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2011/09/03/science/earth/03air.html?pagewanted=all&_r=0), accessed: 7/18/14]

President Obama abandoned a contentious new air pollution rule on Friday, buoying business interests that had lobbied heavily against it, angering environmentalists who called the move a betrayal and unnerving his own top environmental regulators. The president rejected a proposed rule from the Environmental Protection Agency that would have significantly reduced emissions of smog-causing chemicals, saying that it would impose too severe a burden on industry and local governments at a time of economic distress. Business groups and Republicans in Congress had complained that meeting the new standard, which governs emissions of so-called ground-level ozone, would cost billions of dollars and hundreds of thousands of jobs.

## **No New spending**

### **Even if there are proposals, political gridlock makes new spending impossible**

**Grahammar 14**—Senior associate editor at The Atlantic, where he oversees the Politics Channel. He previously reported for Newsweek, The Wall Street Journal, and The National.[DAVID A. "Obama's New Budget Is All About the Midterm Elections",<http://www.theatlantic.com/politics/archive/2014/03/obamas-new-budget-is-all-about-the-midterm-elections/284207/>, enior associate editor at The Atlantic, where he oversees the Politics Channel. He previously reported for Newsweek, The Wall Street Journal, and The National.3:59 PM ET]RMT

Here are a few of the highlights: Obama's proposals would cost \$3.9 trillion, a slight increase from his 2014 proposal of \$3.77 trillion. Only about \$1 trillion of that is discretionary spending, where the president has flexibility; the rest is mandatory money for entitlement programs like Social Security and Medicare. The budget adds \$600 billion in new spending. Most of it would be paid for by raising taxes on the wealthy. The president wants to spend money on universal pre-kindergarten and infrastructure. Obama wants to increase the earned-income tax credit (EITC), an anti-poverty measure that could theoretically attract Republican support. **Many of these are ideas that have come around before, either in previous budgets or in Obama's January State of the Union address.** What's different is that—EITC aside—**there's not much here to humor Republicans.** The **president has dropped last year's proposal for chained CPI, a concession that infuriated Democrats without inducing Republicans to come to the negotiating table, either.** (Deficit hawks are gnashing their teeth at the new plan: Fix the Debt complains that the plan "fails to seize the opportunity to truly confront our nation's long-term debt problem.") **The budget also includes a far more optimistic projection for deficits than the nonpartisan Congressional Budget Office.** **"Our budget is about choices," Obama said** at a D.C. school Tuesday, in remarks about the budget. "As a country, we've got to make a decision if we're going to protect tax breaks for the wealthiest Americans, or if we're going to make smart investments necessary to create jobs and grow our economy, and expand opportunity for every American." Meet Election-Year Obama. **If 2013 was the year of Eternal-Optimist Obama,** who felt residual buzz from his reelection and held out hope Republicans might go for a compromise, **Election-Year Obama's attitude is blunter and bleaker: Fine, if you don't won't meet me halfway, I'm not going to put my neck out.** I'll just ask for what I want. After all, **this budget is dead on arrival. Republicans showed no interest in compromising last year, and they're even less inclined to partner with the president in an election year.** The **GOP fiercely opposes increased spending and says increased taxes on the wealthy could imperil still-sclerotic economic growth.** Representative Paul Ryan, the party's budget guru, blasted the plan, saying Obama's proposal "would demand that families pay more so Washington can spend more. It would hollow out our defense capabilities. And it would do nothing to preserve or strengthen our entitlements. The President has just three years left in his administration, and yet he seems determined to do nothing about our fiscal challenges." **Adding an extra dose of futility, spending levels for this year have already been set by the agreement that Ryan and Senator Patty Murray reached in December.** **Murray says Senate Democrats won't even bother to draft their own budget as a result.**

### **US Improving – Deficit is under controldeficit projected decline in 2014 and 2015**

**Sahadi 14** (Sahadi, Jeanne. "Deficit Continues to Drop Sharply." CNNMoney. Cable News Network, 04 Feb. 2014. Web. 18 July 2014. <<http://money.cnn.com/2014/02/04/news/economy/budget-outlook-deficits-cbo/>>. Jeanne Sahadi is a writer and reporter for CNN that writes about the economy and money. Fred).

The age of trillion-dollar deficits is well over. For now.¶ Thanks to a recovering economy, spending restraint and higher tax receipts, the Congressional Budget Office now projects the deficit for 2014 will be \$514 billion, or 3% of the size of the U.S. economy.¶ As a share of gross domestic product, that represents a nearly 27% drop from

last year, and marks the smallest deficit since 2007.¶ In its latest budget and economic outlook, released Tuesday, the CBO also projected that the 2015 deficit would reach a low for the coming decade, at \$478 billion, or 2.6% of GDP, and then stay below 3% for a couple of years after that.

## **Budget deficit is under control – the deficit has gone down by 100 billion and is continuing to drop**

**Taylor 7/11/14** (Taylor, Andrew. "White House Projects 2014 Deficit Dropping to \$583B, Almost \$100B Less than Last Year." US News. U.S. News & World Report, 11 July 2014. Web. 18 July 2014. <<http://www.usnews.com/news/business/articles/2014/07/11/white-house-2014-deficit-to-drop-to-583b>>. Andrew Taylor is a reporter for the associated press. Fred).

WASHINGTON (AP) — The White House said Friday that the federal government's budget deficit will drop to \$583 billion this year, the lowest level of President Barack Obama's tenure.¶ Last year's deficit was \$680 billion. The latest update from the White House budget office is also \$66 billion less than the administration predicted earlier this year when releasing the president's budget.¶ Obama presided over trillion-dollar-plus deficits during his first term as the economy struggled to recover from a bad recession and financial crisis. Attempts to strike deals with GOP leaders such as House Speaker John Boehner of Ohio have failed, though Obama was successful in muscling through a tax hike on wealthier earners in early 2013. Tight spending on annual agency budgets is also responsible for lower deficits.¶ The nonpartisan Congressional Budget Office projects an even lower deficit of \$492 billion for the budget year ending Sept. 30.¶ The White House has also lowered its economic growth forecast for the current year to 2.6 percent, reflecting the unexpected 2.9 percent drop in gross domestic product in the first quarter of this year. Its earlier prediction was for a 3.3 percent hike in GDP.¶ Obama's March budget release called for a variety of tax increases and promised new help for the working poor and additional money for road-building, education and research. It also pulls back from controversial cuts to Social Security cost-of-living increases that had angered Democrats.¶ The unexpected White House release came as the Treasury Department announced separately that the government ran a surplus of \$71 billion for the month of June.

## **New spending in SQ/increased deficits long term**

**Non- unique new spending coming on entitlements – will squeeze rest of the budget in the SQ**

**Pianin, July 16 2014** (Eric The Fiscal Times,

<http://www.thefiscaltimes.com/Articles/2014/07/16/CBO-Warns-Unchecked-Entitlement-Spending-Unsustainable> accessed tm 7/18)

**There's more bad news for President Obama: The non-partisan Congressional Budget Office warned Tuesday in its annual budget outlook that unchecked spending on Medicare, Social Security and other entitlement programs is "unsustainable" and will eventually drive the federally held debt to historic levels – and threaten the economy.**

While the administration last week celebrated an improving economy and steadily declining budget deficit, the new CBO report says the long-term debt could reach the equivalent of 100 percent of the overall economy within 25 years. Publicly held debt, by contrast, currently equals about 74 percent of the Gross Domestic Product.

**At the same time, most other government programs and services – so-called discretionary spending that is essential to the smooth operation of government – would be severely squeezed.**

**After several more years of declining deficits and overall debt, budget deficits will begin to rise again.** "Debt would be on an upward path relative to the size of the economy, a trend that could not be sustained indefinitely," says the CBO's 2014 Long-Term Budget Outlook.

**More spending now – and future demands bust deficits**

**Pianin, July 16 2014** (Eric The Fiscal Times,

<http://www.thefiscaltimes.com/Articles/2014/07/16/CBO-Warns-Unchecked-Entitlement-Spending-Unsustainable> accessed tm 7/18)

**In addition, federal revenues would grow substantially under current law as a percentage of the overall economy – at a faster rate than any time in memory.** Revenues would equal 19.5 percent of GDP by 2039, compared to an average of 17.5 percent over the past four decades, the report stated.

**Even so, the report said, spending would soon begin to outpace revenues by increasing amounts relative to GDP and in turn generate higher budget deficits.**

**"Federal debt held by the public is projected to grow faster than the economy starting a few years from now, and because debt is already unusually high relative to GDP, further increases could be especially harmful,"** the report stated.

## **Growth Uniqueness – unsustainable**

## No growth now

### **No growth now – recent report show sharp decline**

House, 6/25/14 (Jonathan “U.S. Economy Shrinks by Most in Five Years” WSJ

<http://online.wsj.com/articles/u-s-gdp-contracted-at-2-9-pace-in-first-quarter-1403699600>)

**Gross domestic product, the broadest measure of goods and services produced across the economy, fell at a seasonally adjusted annual rate of 2.9% in the first quarter**, the Commerce Department said in its third reading of the data Wednesday. **That was a sharp downward revision from the previous estimate that output fell at an annual rate of 1%. It also represented the fastest rate of decline since the recession, and was the largest drop recorded since the end of World War II that wasn't part of a recession.** To be sure, many signs since March, including reports of growth in consumer spending, business investment and hiring, indicate the first quarter doesn't mark the start of a new recession. And revisions in future years could alter the first-quarter figure. J.P. Morgan Chase economist Michael Feroli described the decline as "mostly a confluence of several negative, but mostly one-off, factors." **But the severity of the drop, he said, "calls into question how much vigor there is in the pace of activity" going forward.**

### **US growth not occurring now – multiple headwinds**

**Gordon, Department of Economics Northwestern, 2012** (Robert, “IS U.S. ECONOMIC GROWTH OVER? FALTERING INNOVATION CONFRONTS THE SIX HEADWINDS” Working Paper 18315 August 2012 <http://www.nber.org/papers/w18315> accessed tm 7-16)

(2) **Whatever the future of innovation, the U.S. economy still faces six daunting headwinds that will limit future potential growth and hold it below the pace which innovation would otherwise make possible.** Recall that Figure 1, the graph with the blue and red step-like representation of growth rates of real per-capita GDP over long intervals, included a forecast. The final downward step assumed that growth in real GDP per capita would slow from the actual 1.8 percent rate recorded during 1987-2007, to a lower 1.4 percent rate.<sup>11</sup> This slowdown in growth already takes into account the first two headwinds. **The “demographic dividend” is now in reverse motion.** The original dividend was another one-time-only event, the movement of females into the labor force between 1965 and 1990, which raised hours per capita and allowed real per-capita real GDP to grow faster than output per hour. **But now the baby-boomers are retiring, no longer included in the tally of total hours of work but still included in the population. Thus hours per capita are now declining, and any tendency for life expectancy to grow relative to the average retirement age will further augment this headwind. By definition, whenever hours per capita decline, then output per capita must grow more slowly than productivity. The second headwind already taken into account in the 2007-27 forecast is the plateau in educational attainment** in the U.S. reached more than 20 years ago, as highlighted in the path-breaking work of Claudia Golden and Lawrence Katz (2008). The U.S. is steadily slipping down the international league tables in the percentage of its population of a given age which has completed higher education. This combines several problems. One is the cost disease in higher education, that is, the rapid increase in the price of college tuition relative to the prices of other goods. This cost inflation in turn leads to mounting student debt, which is increasingly distorting career choices and deterring low-income people from going to college at all. Not everybody gets a scholarship.



## Rising inequality curtails economic growth

**Gordon, Department of Economics Northwestern, 2012** (Robert, "IS U.S. ECONOMIC GROWTH OVER? FALTERING INNOVATION CONFRONTS THE SIX HEADWINDS" Working Paper 18315 August 2012 <http://www.nber.org/papers/w18315> accessed tm 7-16)

The most important quantitatively in holding down the growth of our future income is rising inequality. The growth in median real income has been substantially slower than all of these growth rates of average per-capita income discussed thus far. The Berkeley web site of Emmanuel Saez provides the startling figures. From 1993 to 2008, the average growth in real household income was 1.3 percent per year. But for the bottom 99% growth was only 0.75, a gap of 0.55 percent per year. The top one percent of the income distribution captured fully 52% of the income gains during that 15-year period. If what we care about when we talk about "consumer well being" is the bottom 99 percent, then we must deduct 0.55 percent from the average growth rates of real GDP per capita presented here and elsewhere.

## Recession decreased consumption – 4 reasons

**Petev, Pisaferri, and Eksten 11** (Ivaylo, Luigi, Itay, Stanford Dept. of Sociology, August 2011, "CONSUMPTION AND THE GREAT RECESSION: AN ANALYSIS OF TRENDS, PERCEPTIONS, AND DISTRIBUTIONAL EFFECTS," [http://web.stanford.edu/~isaporta/cons\\_recess\\_August\\_2011.pdf](http://web.stanford.edu/~isaporta/cons_recess_August_2011.pdf), ND)

There are three distinctive features of **the Great Recession**. First, it **was deep. Consumption per capita fell monotonically from** the last quarter of **2007** (the official starting date of the recession) **throughout the first half of 2009** (a decline greater than 4 percent from peak to trough). **The decline was stronger for durables (and among them, vehicles), but spending on nondurables** and (especially) services also **fell significantly** compared to previous recessions. Interestingly, **consumption fell more (and it took more time to recover) than disposable income**, partly as a result of an increase in government transfers to households (particularly, unemployment insurance claims). Second, **the recession was long. In fact, it was the longest recession to date since the Great Depression, with consumption still trailing 2 percent below pre-recession levels after 15 quarters from the starting date and 8 quarters after the recession had officially ended.** Finally, the varying impact the recession has had across age, race, education and wealth groups resulted in a decline in consumption inequality. **We single out four explanations for the observed change in consumption** during the Great Recession and for its unequal impact on socio-demographic groups. One is the "wealth effect", that is, the response of consumers to the destruction of wealth which followed from the burst of the housing bubble and the stock market collapse of 2008. **A second is an increase in uncertainty, a decline in consumer confidence which may have reduced spending through accumulation of precautionary savings** (or reduction of debt) **as well as deferment of spending, most notably on durables.** Third, **changes in relative prices, especially gasoline, may have reverberated on both the consumption of gasoline as well as of its complementary goods like cars and transportation services.** Finally, **the credit crunch that followed the financial crisis may have prevented some households from purchasing goods that are typically acquired through borrowing, such as cars or other big-ticket items.**

## **Collapse economy inevitable /mindset shift possible**

### **Growth is unsustainable- transitioning now is key**

**Assadourian 12** MOVING TOWARD SUSTAINABLE PROSPERITY THE WORLDWATCH INSTITUTE Erik Assadourian State of the World 2012 [http://blogs.worldwatch.org/sustainableprosperity/wp-content/uploads/2012/04/SOW12\\_chap\\_2.pdf](http://blogs.worldwatch.org/sustainableprosperity/wp-content/uploads/2012/04/SOW12_chap_2.pdf)

#### **Ultimately, overdeveloped countries (and overdeveloped populations within developing countries)**

**will need to either proactively pursue a degrowth path or continue** down the broken path of growth **until** coasts flood, farmlands dry up, and other **massive ecological changes force them away from growth into a mad dash for societal survival**. If overdeveloped populations keep ignoring the looming changes—keeping their proverbial heads buried in the sand—then this transition will be brutal and painful. But **if a strategy of degrowth, economic diversification, and support for the informal**

**economy is pursued now**, before most of societal energy and capital is focused on reacting to ecological shifts, these overdeveloped populations may discover a series of benefits to their own welfare, to their long-term security, and to Earth's well-being. It is no surprise that overdeveloped countries also suffer from a series of ailments connected to overconsumption—since affluence and development decoupled long ago for many in these countries. The clearest indicator is the obesity epidemic now plaguing most industrial countries and developing-world elites. In the United States, two of every three adults are now overweight or obese, reducing their quality of life, shortening life spans, and costing the country an extra \$270 billion a year in medical costs and lost productivity due to early deaths and disabilities. This epidemic may even lead to the next generation living fewer years than their parents did, primarily due to obesity-related problems like heart disease, diabetes, and certain cancers. Tragic statistics, but there are many who prosper from this type of growth: agribusiness, processed-food manufacturers, marketers, hospitals, pharmaceutical companies, and others all profit from maintaining the status quo. The diet industry alone earns up to \$100 billion a year on obesity in the United States. And the United States is not exceptional on this front, merely a trendsetter. In 2010, 1.9 billion people were overweight or obese worldwide, up 38 percent over 2002, even though total population rose 11 percent in that time. <sup>8</sup> Obesity, unfortunately, is not the only side effect of overdevelopment. Increased debt burdens, long working hours, pharmaceutical dependence, time trapped in traffic, even increased levels of social isolation stem at least in part from high-consumption lifestyles. Indeed, while many modern advances—personal transport, single-family homes, televisions, computers, and electronic gadgets—seem to have improved human well-being, in reality these advances may have imposed significant sacrifices on consumer populations without their knowledge or consent. **9 More**

**broadly, along with reducing the physical and societal side effects of the obsessive pursuit of growth, pursuing degrowth would reduce the ecological impacts of the human economy, as some populations would consume less** food, resources, and energy. Perhaps **the most important but least tangible outcome of this would be to reduce the loss of Earth's resiliency, which humanity and all species depend on completely for their ability to survive and thrive**. Of course, **it is simple to advocate for the sanity of degrowing the ecologically destructive global economy**. But when growth is one of the fundamental sacred myths of modern culture, and when economists, the media, and political leaders routinely wring their hands whenever the economy contracts, shifting paradigms 180 degrees will be extremely difficult. Instead, **degrowth will need to be pursued very strategically—working simultaneously on a variety of complementary fronts**.

### **Economic growth can't sustain population growth**

**Brent '11** – frequent contributor to Countercurrents, expert on population issues

(Jason, "Cessation of Growth: Voluntary and Coercive Population Control," 7/18, <http://www.countercurrents.org/brent180711.htm>)

1. The Earth is finite in size.
2. Population and economic growth must cease. Infinite population and/or economic growth cannot occur on the finite Earth.
3. Both population and the economy grow in a compound/exponential manner.
4. Compound/exponential growth is the most powerful force in the universe, it overwhelms everything.
5. If anything were to grow at the compound growth rate of one percent per year it would double in about 70 years; increase by a factor of four in 140 years; a factor of eight in 210 years and a factor of 1,000 (actually 1,024) in 700 years. If growth were to continue at the same compound rate for an additional 700 years, total of 1,400 years, it would increase by a factor of 1 million and if growth continued at the same rate for a total of 2,100 years the factor would be 1 billion. At the extremely small rate of growth of one quarter of one percent (0.0025) it would take about 2,800 years, less time than from the construction of the pyramids until today, for either the economy or the population to grow by a

factor of greater than 1,000. And 2,800 years is almost an infinitely small period of time when compared to the 160 million years that the dinosaurs ruled the earth.

6. Since compound/exponential growth is so powerful, both the economy and the population of the world must cease their growth in the very near future. I can state with almost absolute certainty that if either were to grow at the compound rate of one percent per year growth will cease no later than 140 years from today as such a growth rate would cause both of them to increase by a factor of four and the Earth could not support a population four times as great as the present population or a world economy four times as great as the current world economy.

7. The resources used by humanity can be divided into two groups, nonrenewable and renewable. By definition nonrenewable resources are finite and will eventually be used up by humanity. Many, if not most, renewable resources are being used up by humanity faster than nature can replace them and, therefore, they also must be considered nonrenewable.

8. Recycling, substitution of one resource for another resource, new technologies, environmentalism, and any other action taken by humanity will not permit continuous compound economic and/or population growth. Alternative energy resources will not permit continuous compound population and/or economic growth. Humanity has withdrawn from the Earth the most easily accessible resources which the Earth can provide. In the future resources will become more expensive and difficult to obtain as they will be substantially less accessible and will be more difficult to process into usable a form.

9. The concept of obtaining resources from extraterrestrial planets or transferring part of humanity to extraterrestrial planets is a non-workable fallacy.

## Mindset shift is possible.

**Victor 10** - Peter Victor is an economist at York University in Toronto, Ontario and author of Managing Without Growth: Slower by Design, Not Disaster, Questioning economic growth, Nature 468, 370–371 (18 November 2010)

The idea that governments of developed countries should no longer pursue economic growth as a primary policy objective is widely regarded as heresy. Yet a growing number of scholars, policy-makers and citizens are coming round to the idea that the planet cannot sustain continued global economic growth. Even economist Robert Solow, who won the 1987 Nobel Prize in Economics for his work on economic growth, said in 2008 that the United States and Europe might soon find that “either continued growth will be too destructive to the environment and they are too dependent on scarce natural resources, or that they would rather use increasing productivity in the form of leisure”<sup>1</sup>. The idea of steady-state economies, or even economic 'degrowth', in developed countries is gaining traction. The reasons for disenchantment with economic growth as a paramount policy objective are not hard to find. Humanity has gone beyond the 'safe operating space' of the planet with respect to climate change, nitrogen loadings and biodiversity loss, and threatens to do so with six other major global environmental issues<sup>2</sup>. This excessive burden on Earth can be traced to the massive increase in the materials, fossil fuels and biomass used by the world's economies. Mankind's 'throughput' — the sheer weight of materials, including fuel, that feed the world's economies — has increased 800% in the twentieth century<sup>3</sup>, with a correspondingly large increase in wastes returned to the environment. In the same time, the human population has risen from 1.6 billion to more than 6 billion, and our presence has been felt over an increasingly large part of Earth's surface. All of this drove and was driven by unprecedented economic growth, the benefits and costs of which have been spread remarkably unevenly around the planet. A key question now is whether and how economies can develop in a way that respects Earth's biophysical boundaries and feeds the 9 billion people expected by mid-century. One option is for developed countries to continue striving for economic growth, while attempting to reduce impacts on the planet. This means betting that economic growth can be successfully and rapidly decoupled from material and energy inputs. Such 'green growth' is currently favoured by the Organisation for Economic Co-operation and Development (OECD). But it can be confounded by the rebound effect: efficiency improvements often induce changes that reduce, nullify or outweigh environmental and resource benefits. This was first recognized in 1865 by economist W. S. Jevons, who noted that improvements in steam engines were accompanied by an increase in total coal consumption. By 1910, the best steam engines in the United Kingdom were about 36 times more efficient than those of 1760 (ref.<sup>4</sup>), but a 2,000-fold rise in steam-power use<sup>5</sup> had increased coal consumption dramatically. A rebound of 50% is not unusual for many technologies. What price happiness? An alternative is to encourage growth in sectors of the economy that use fewer resources, such as the service sector. Such a strategy could buy some time, but not if it simply shifts the production of resource-intensive products and their related environmental

burdens to other countries, as has been the pattern in recent years. **A third option is to limit growth itself.** The battle against climate change illustrates the attractiveness of this strategy. To reduce greenhouse-gas emissions (GHG) by 80% over 50 years, an economy that increases its real gross domestic product (GDP) by 3% a year must reduce its emissions intensity — tonnes of GHG per unit of GDP — by an astonishing 6% a year. For an economy that does not grow, the annual cut would be a still very challenging 3.2%. **The view that we should curb planetary impacts by reducing growth in richer countries is reinforced by several considerations. First, there is mounting evidence that this growth is largely unrelated to measures of happiness. Second, in recent decades, increasing inequality has accompanied much of this growth, leading to problems ranging from poor public health to social unrest. Third, the prospects for real improvement in the developing world are likely to be diminished if developed countries continue to encroach on more ecological space.** Removing economic growth as a major policy priority runs counter to the views of governments and many international agencies. Many nations responded to the recent financial crisis with desperate measures to resume economic growth. Yet **when we recognize how briefly economic growth has held such prominence in policy circles, dethroning it seems less improbable. Regular estimates of GDP by governments date back only to the 1940s,** and the measure was initially used in support of specific objectives, such as stimulating employment. **Only in the 1950s did economic growth become a policy priority in its own right**<sup>6</sup>

## **Growth uniqueness - sustainable**

See section on US economy improving

# **US Key to Global Recovery**

## **US Key to Global Economic Recovery**

**Fan '7/10/14** (Wang Fan; China Daily Web Editor; 2014-07-10; Minister: US 'key' to global recovery; China

Daily; <http://webcache.googleusercontent.com/search?q=cache:http://www.ecns.cn/business/2014/07-10/123325.shtml>; 7/18/14; JX)

**A global economic recovery rests mainly on the United States' shoulders, Finance Minister Lou Jiwei said** on Wednesday. **"A global recovery requires joint efforts from many countries, but the key lies with the US,"** Lou told reporters on the first day of the annual China-US Strategic and Economic Dialogue in Beijing. "China is experiencing a transition from a high-growth model to a medium-high-growth model. We are now focusing more on the 'new norm' of structural reform. **"So the scenario is unlikely to recur in which China contributes to half of the world's growth** in the aftermath of the 2008 financial crisis." The Chinese government has repeatedly said it would not roll out an intensive stimulus program after the nation's gross domestic product growth in the first quarter dipped to 7.4 percent, an 18-month low. It is the first time a top Chinese official has explicitly said that the global economy should not count on China for it to recover. US GDP in the first quarter declined 2.9 percent from the previous year due to the extreme weather of the past winter. But **hope is rising that the world's largest economy may rebound strongly in the second quarter, given robust new job data in recent months**. In response to the likely second-quarter recovery, **the US Federal Reserve said it would reduce monthly bond purchases to \$45 billion, and announced it will further cut it to \$35 billion starting from July.** But this has stirred fears that the tapering will trigger a massive capital outflow in emerging markets. Lou said both China and the US recognize that the tapering of the previous monetary policy is beneficial and will not bring global imbalance. "But we should pay attention to the orderly tapering. The consequence might reflect the cross-border flow of speculative capital in developing countries and might add difficulties to our management of the foreign exchange," Lou said. "The US has continued to demand less Chinese government interference in the yuan's value, but it is difficult for us to do that under the current situation in which the economy has not yet recovered and cross-border capital flow is not normal," he said. Lou also said China's economy was stable, and structural reforms were showing results. He said **China has made progress in its economic rebalancing and that he hoped the US could deliver on its economic measures.**

## **US operations directly affect global economy**

**AN '6/2/14** (Automotive News; June 2, 2014; Marchionne Says U.S. Key To Global Growth; Around the Net; Media Post; <http://www.mediapost.com/publications/article/227049/marchionne-says-us-key-to-global-growth.html>; 7/18/14; JX)

TRENTO, Italy (Reuters) -- **Fiat Chrysler Automobiles CEO Sergio Marchionne said a good performance by its U.S. operations will be crucial for the success of the company's recently announced business plan.** The automaker launched a breakneck global growth effort last month built around its Jeep, Alfa Romeo and Maserati brands. The business plan aims to boost sales by 60 percent and increase net profit five-fold by 2018. **"The execution of the (Fiat Chrysler Automobiles) business plan announced on May 6 depends on the fact that the U.S. operations perform well," Marchionne said** at a business event Sunday in the Italian town of Trento. Marchionne said the company needed cash from Chrysler's U.S. operations to fund its strategy in Europe, where Fiat was still battling with a weak and fragile economic recovery and the market's overcapacity for mass-market brands. Chrysler filed for bankruptcy in 2009 and received a U.S. taxpayer-funded bailout. Fiat took over the U.S. automaker at the time and completed the buyout at the beginning of this year to become the world seventh-largest carmaker. The group is preparing to move its main listing from Milan to New York by the end of this year. Marchionne said Chrysler's financial strength and commercial clout overseas would help Fiat boost sales of Alfa Romeo, which under the plan will build eight new models by the end of 2018 thanks to investments worth 5 billion euros (\$6.8 billion). "On Friday I saw the prototype for one of the new models engineers are developing in secret, and I can say we are on the right track," he said, adding that the model would probably be unveiled in the third quarter of next year. Marchionne confirmed that all Alfa Romeo cars would be produced at Italian plants, at least until 2018, and said he would ask the government of Prime Minister Matteo Renzi to take measures to facilitate exports. "I am not asking for financial aid. I am asking for logistic, regulations ...

changes to help exports," Marchionne said, lamenting that he had not received any such help from Renzi's predecessors. Marchionne, who in the past ignored opposition from Italian labor unions and industry lobby Confindustria to negotiate company-level job contracts at Fiat plants, voiced support for the 39-year-old Renzi, who took office in February. "I like Renzi very much; I hope he will find support for his agenda ... it is the only agenda we have both in Italy and in Europe," Marchionne said. Renzi has promised to try to focus euro zone policies on growth and employment and away from austerity during the six months that Italy will hold the rotating European Union presidency starting in July. Said Marchionne: "The austerity that came from Germany doesn't make any sense for Europe now."

## **US Key to Global Economy**

**MCTEER and GRUBEN 03** (ROBERT MCTEER AND WILLIAM GRUBEN, Spring 2003, "The View From The Front of the Train" Access 7-18, AW)

The paradox of having nearly the lowest trade-to-GDP ratio of any country but also the highest level of trade of any country offers pointed implications for the relation of our business cycle to those of other nations. It suggests that **while trade and other international events obviously affect the United States, the United States is likely to affect other countries' business cycles far more**. The role of monetary shocks in the international communication of business cycles complicates these issues still more and re-emphasizes the impact of U.S. cycles on other countries. There is much evidence of a jump in international business-cycle correlation since the replacement of the Bretton Woods fixed exchange rate arrangement with a more flexible system. **Related post-Bretton Woods increases in the volatility of U.S. monetary shocks compared with those of other large economies—and the transmission of these shocks—have pushed up the correlation of many nations' output with the United States'. Even without changing trade patterns, monetary events in the United States may drive business cycles elsewhere more than they used to—but not so much the other way around.**

## **Link debate – X hurts the economy/expensive**

**Note about link cards – some cards assume regulation harms the ability of the economy to function. Some link cards are about the expense of the program or compliance with the regulation is expensive. Some talk about both – thus, we did not separate the various link cards you would use for the DAs – but, for example, if you are reading the spending DA, reading regulation link ev won't help you.**

**You can use these link cards to link turn advantages as well when teams claim they solve economic growth**



## Shift to renewable energy hurt economic growth

**Renewable energy overly expensive and detrimental to the economy – even if they win their plan is cost effective integration into the grid creates public expense**

**Bryce 12** (Bryce, Robert. "Energy Policy & the Environment Report | THE HIGH COST OF RENEWABLE ELECTRICITY MANDATES." Energy Policy & the Environment Report | THE HIGH COST OF RENEWABLE ELECTRICITY MANDATES. N.p., 10 Feb. 2012. Web. 17 July 2014. <[http://www.manhattan-institute.org/html/eper\\_10.htm](http://www.manhattan-institute.org/html/eper_10.htm)>. Robert Bryce is a senior fellow with the Center for Energy Policy and the Environment at the Manhattan Institute. He has been writing about energy for two decades, and his articles have appeared in numerous publications ranging from The Wall Street Journal to The Nation and the Atlantic Monthly to the Washington Post. Fred/John/Eric).

Motivated by a desire to reduce carbon emissions, and in the absence of federal action to do so, 29 states (and the District of Columbia and Puerto Rico) have required utility companies to deliver specified minimum amounts of electricity from "renewable" sources, including wind and solar power. California recently adopted the most stringent of these so-called renewable portfolio standards (RPS), requiring 33 percent of its electricity to be renewable by 2020.¶ Proponents of the RPS plans say that the mandated restrictions will reduce harmful emissions and spur job growth, by stimulating investment in green technologies.¶ But this patchwork of state rules—which now affects the electricity bills of about two-thirds of the U.S. population as well as countless businesses and industrial users—has sprung up in recent years without the benefit of the states fully calculating their costs.¶ There is growing evidence that the costs may be too high—that the price tag for purchasing renewable energy, and for building new transmission lines to deliver it, may not only outweigh any environmental benefits but may also be detrimental to the economy, costing jobs rather than adding them.¶ The mandates amount to a "back-end way to put a price on carbon," says one former federal regulator. Put another way, the higher cost of electricity is essentially a de facto carbon-reduction tax, one that is putting a strain on a struggling economy and is falling most heavily, in the way that regressive taxes do, on the least well-off among residential users.¶ To be sure, the mandates aren't the only reason that electricity costs are rising—increased regulation of coal-fired power plants is also a major factor—and it is difficult to isolate the cost of the renewable mandates without rigorous cost-benefit analysis by the states.¶ That said, our analysis of available data has revealed a pattern of starkly higher rates in most states with RPS mandates compared with those without mandates. The gap is particularly striking in coal-dependent states—seven such states with RPS mandates saw their rates soar by an average of 54.2 percent between 2001 and 2010, more than twice the average increase experienced by seven other coal-dependent states without mandates.¶ Our study highlights another pattern as well, of a disconnect between the optimistic estimates by government policymakers of the impact that the mandates will have on rates and the harsh reality of the soaring rates that typically result. In some states, the implementation of mandate levels is proceeding so rapidly that residential and commercial users are being locked into exorbitant rates for many years to come. The experiences of Oregon, California, and Ontario (which is subject to a similar mandate plan) serve as case studies of how rates have spiraled.¶ A backlash may result that could even imperil the effort to protect the environment. Some of the renewable-energy projects being built in California are so expensive that "people are going to get rate shock," according to Joe Como, acting director of the Division of Ratepayer Advocates, an independent consumer advocacy arm of the California Public Utility Commission. "In the long run," he said recently, the approval of overpriced renewable energy will harm "the states' efforts to achieve greenhouse gas reductions."¶ Given that the RPS mandates have not received enough study and that they appear to be posing risks to a fragile economy, the prudent course of action is to put the state programs on hold. Existing mandates should be suspended and new ones blocked pending a thorough cost-benefit analysis to determine responsible levels of renewable electricity. In the meantime, where practical, natural gas, the cleanest conventional fuel as well as the least expensive, could fill any gaps in energy supply.

## Algae Biofuels expensive

**Algae biofuel tech is expensive – we are nowhere near having good enough tech for it to remain competitive**

**Kanellos 9** (Michael, writes about energy, transportation, food and data for Forbes, 2/3/2009, Green Tech Media, "Algae Biodiesel: It's \$33 a Gallon," <http://www.greentechmedia.com/articles/read/algae-biodiesel-its-33-a-gallon-5652>, ND)

**You can grow algae with carbon dioxide and sunlight, but that doesn't mean it's free.** Although many believe that algae will become one of the chief feedstocks for diesel and even hydrocarbon-like fuels, **growing large amounts of algae and then converting the single-celled creatures remains expensive**, said experts at the National Biodiesel Conference taking place in San Francisco on Tuesday. **Algae biofuel startup Solix, for instance, can produce biofuel from algae right now, but it costs about \$32.81 a gallon, said Bryan Wilson, a co-founder of the company and a professor at Colorado State University. The production cost is high because of the energy required to circulate gases and other materials inside the photo bioreactors where the algae grow.** It also takes energy to dry out the biomass, **and Solix uses far less water than other companies** (see Cutting the Cost of Making Algae by 90%). **By exploiting waste heat at adjacent utilities** (one of our favorite forms of energy around here), **the price can probably be brought down to \$5.50 a gallon** (see Will Waste Heat Be Bigger Than Solar?). By selling the proteins and other byproducts from the algae for pet food, the price can be brought to \$3.50 a gallon in the near term. But that's still the equivalent of \$150 a barrel of oil. **"We we're excited in July** [when oil was approaching that level]," he joked. **"But we knew it wasn't sustainable."** It's only in phase II of Solix's business plan that it will be able to drop production costs to \$3.30 to \$1.57 a gallon, or around \$60 to \$80 a barrel. Solix has set a goal of cutting the cost of making algae by 90 percent. Is algae a good feedstock? Yes, he insisted. Ultimately, algae could yield 5,000 to 10,000 gallons an acre, far higher than other feedstocks. Soy is only good for around 40 to 50 gallons an acre. Touted plants like jatropha might only produce 175 gallons an acre, he said. But **algae comes with trade-offs. Wild algae grows fast, but it doesn't yield tremendous amounts of oil naturally – two thirds or more of the body weight of wild algae will be proteins and carbohydrates instead of oil. Genetically modified algae can boost the oil content, but that slows the growth process. Closed bioreactors – i.e., sealed plastic bags placed in the sun -- cost more than open ponds, but it's tough to keep invasive species from taking over open ponds and out-competing algae optimized to produce oil.** "There's a dance between the growth rate and lipid content," Wilson said. Much of the cost reduction for Solix will be accomplished through extraction techniques the company hasn't discussed yet. And algae companies will have to harvest everything their microorganisms produce. **"We don't have the solutions that are publicly discussed that give us the costs that we need,"** he said, adding, "The value of the co-products have to be captured and the value of the co-products could exceed the value of the oil." **Some companies, like Solazyme, are exploiting genetic science and fermenting techniques to accomplish the task.** In fermentation, specific species of algae are locked into brewing kettles with sugars derived from old plant matter. When the time is right, **Solazyme takes out the microbes and squeezes out the oil. It's cheaper to get large volumes of feedstock oil through fermentation than growing algae in ponds or bioreactors,** said CEO Jonathan Wolfson. Genetically modifying the algae can boost the lipid, or oil, content to 70 percent of the organism's weight. In a sense, **Solazyme practices indirect photosynthesis: the algae doesn't grow by having sunlight shone upon it but by eating sugars that were grown in the sun. "Algae is by far the best organism on the planet for converting fixed carbon into oil,"** he said. **"But economically, others are more efficient at taking sunlight and carbon dioxide and turning it into oil."**

## Studies prove algae biofuels suck – unreliability and maintenance drives up costs

**Richardson et al 13** (James W. Richardson and Myriah D. Johnson: Agricultural & Food Policy Center; Department of Agricultural Economics; Texas A&M University, Xuezhi Zhang, Peter Zemke, and Qiang Hu: Laboratory for Algae Research and Biotechnology; College of Technology and Innovation; Arizona State University, Wei Chen: Institute of Hydrobiology; Chinese Academy of Science, 5/31/13, Elsevier Algal Research, “A financial assessment of two alternative cultivation systems and their contributions to algae biofuel economic viability,” <http://www.sciencedirect.com/science/article/pii/S2211926413001215>, ND)

The cultivation systems were scaled to produce the same amount of crude bio-oil. CAPEX and OPEX for harvesting and extraction are scaled for the two systems based on required throughput of water and biomass. **The average total cost of production for crude bio-oil is 109.12 \$ gal<sup>-1</sup> for the ORP and 76.98 \$ gal<sup>-1</sup> for the PBR system.** The range of costs simulated for the two systems is much wider for the ORP due to the greater risk of production. The relative risk for the estimated probability distribution of total costs per gallon is 42.0% for ORPs and 33.4% for PBRs. **The PBR system has a 26% lower relative risk for total costs which again is a function of the reduced risks for biomass production and lipid concentration.** The PBR cultivation system has a significantly lower risk of producing a targeted level of lipid each year than an ORP and the total cost per gallon of oil will be lower. **The reactor is the major capital investment for both cultivation systems, and interest costs account for the majority of the crude bio-oil operating cost. At present, the costs for either existing cultivation system are too high and any incremental improvement in the current cultivation systems and processes won't dramatically change the estimated cost structure. For biofuels from microalgae to be an economically viable industry, next generation cultivation systems and processes will have to be developed that can increase biomass productivity by an order of magnitude greater than what has been achieved today while at the same time reducing substantially CAPEX and OPEX.** These will be the greatest challenges and opportunities to the microalgal research community and algal industry for many years to come. The results of the analysis show that **with current costs neither system is economically profitable, however the PBR system has a much greater NCI and lower cost per gallon of crude bio-oil.** The risk analysis shows that on a relative risk basis NCI for the ORP cultivation system is 26% more variable (riskier) than the PBR system. The increased risk for the ORP system causes over investment in pond area to ensure meeting the annual biomass production requirement, which leads to even greater volumes of water having to be harvested which inflates harvesting and extraction OPEX costs (7.40 \$ gal<sup>-1</sup> vs. 3.54 \$ gal<sup>-1</sup>). **Cultivation OPEX costs for the ORP system are 30% greater than the PBR due largely to greater maintenance and labor costs associated with a larger farm. Biomass production is 59% more variable for the ORP than the PBR due to a greater probability of crashes and the over investment in production capacity to ensure observing the assumed average annual oil production of 50,000 MT.** The increased relative risk for biomass production coupled with higher relative risk in lipid content for ORPs leads to greater absolute and relative risk for total annual lipid production. The results show that relative risk associated with producing 50,000 MT of lipid per year is 69% greater for ORPs.

## Iron Fertilization expensive – costs and long term maintenance

**Iron fertilization isn't the best option – other tech is cheaper and we would have to keep dumping forever**

**University of Sydney 12**

(12/12/12, "Iron fertilisation sunk as an ocean carbon storage solution

," <http://sydney.edu.au/news/84.html?newsstoryid=10740> ND)

Daniel Harrison, a postgraduate researcher and author of a paper published in this month's International Journal of Global Warming, says **while iron fertilization of high-nutrient, low-chlorophyll regions of the ocean captures and stores carbon dioxide from the atmosphere, it does not store carbon long enough to be an attractive contributor to climate management. Iron fertilization is more expensive than carbon capture and storage (CCS) and is much more expensive than the Australian carbon price**, which is currently charged at \$23 per ton of carbon dioxide, says Harrison. In his paper, Harrison argues that **the cost of iron fertilization will vary with the oceanographic conditions** at the time and location of fertilization, **but in almost all situations it is an expensive operation. As well as being expensive, the amount of carbon stored for more than a century is so small that it is uncertain whether measurable storage will occur at all.** "This means that while under certain conditions the cost may be moderate, under less ideal conditions, **iron fertilization may actually create more greenhouse gas than is sequestered,**" says Harrison. The study used average results from iron fertilization experiments conducted in the Southern Ocean and concluded that **the mean price will be over \$400 per ton of carbon dioxide sequestered from the atmosphere for 100 years or more. "If the ocean is to play a greater role in storing carbon, we will need to develop more effective and economical technologies that are competitive with abatement opportunities on land,"** says Harrison. Harrison's research is being conducted at the Sydney Institute of Marine Science, part of the Univ. of Sydney's cross-disciplinary research program investigating the impact of climate change on the ocean. Attention at the university will now focus on other ocean carbon storage strategies that have promise to store carbon at less than \$23 per ton of carbon dioxide.

### **Iron fertilization won't work –inefficiency**

**Allsopp, Santillo, and Johnston 7** (Greenpeace Research Laboratories, September 2007, "A scientific critique of oceanic iron fertilization as a climate change mitigation strategy,"

[http://www.climos.com/imo/Other/Other\\_greenpeace\\_iron\\_fert\\_critiq\\_Sep2007.pdf](http://www.climos.com/imo/Other/Other_greenpeace_iron_fert_critiq_Sep2007.pdf), ND)

**To be effective as a carbon sequestration technology, particulate organic carbon (dead plankton and faecal matter) has to be exported efficiently to deeper waters** (at least 200 metres). However, **published results from the mesoscale iron enrichment studies showed that the amount of carbon exported was either very low or not detectable. This inefficient export of particulate organic carbon to deep waters does not favour iron fertilization as a carbon sequestration technology. For example, during the Southern Ocean Iron Experiment (SOFEX) iron enrichment study, an area of 15 km<sup>2</sup> was seeded with iron, resulting in a carbon sequestration of about 900 tonnes of carbon. This is a very small proportion of the carbon released due to human activities (6.5 x 10<sup>9</sup> tonnes/year), such that it is difficult to see how iron fertilization could scale up to be an effective carbon sequestration method.** Other practical problems using continuous iron fertilization as a carbon sequestration technology include the fact that the macronutrients nitrate, phosphorous and silica would become depleted and would therefore prevent the ongoing growth of phytoplankton. In addition, **continuous fertilization would allow mesozooplankton sufficient time to increase in number, leading to increased grazing pressure on the**

diatoms. This would restrict their proliferation and, therefore, the amount of carbon being exported to deep water. Modelling studies have predicted that iron fertilization is likely to be highly inefficient. Estimates showed that it would require an impossibly large area to be fertilized each year (equivalent to about twice the Earth's surface!) to have any significant impact as a carbon sequestration technology. Verifying the quantity of carbon sequestered from iron fertilization is also likely to be difficult (if not impossible) because of the large spatial and temporal scales involved. It is also likely that commercial-scale iron fertilization would be prohibitively expensive because of the cost of the large-scale monitoring programs which would be needed in order to trace and verify the amount of carbon sequestered, as well as to monitor for any negative impacts such as nitrous oxide formation, de-oxygenation or ecological changes.

## **energy investments (short term) hurt economy – laundry list**

**Green tech puts the economy at risk – stock bubbles and speculation means it could collapse at any time**

**Puskorius 13** (Viktoras, Global Edge Writer ,9/4/13, “Green Technology: The Next Big Economic Bubble,”

<http://globaledge.msu.edu/blog/post/1540/green-technology--the-next-big-economic-bubble>, ND)

**Economic bubbles have been a reoccurring economic cycle in the world throughout the history of**

**capitalism.** Recent economic bubbles that the world has experienced include dot-com/telecom, real estate, stocks, and biotech bubbles.

They date back to the 1880's when the first railroad tracks were laid down in the United States. The goal was to connect the United States through economic integration and development, which created a boom in the development of canals, turnpikes, railroads, and telephone lines.

**Many of these projects were funded by the government, and now green technology projects are**

**funded by them as well.** Globally, **governments are beginning to promote green technologies through**

**loans and subsidies. The rapid growth the world has seen in green technology could be the start of the**

**next big economic bubble.** An example of a “green-tech” company that has seen high growth and popularity in the past year is the

electric car maker Tesla. The company is using popularity and interest in its electric cars to create a micro bubble in its stock. **Currently the**

**car company is trading at about \$170 per share, while it has only reported positive earnings in one**

**quarter throughout its tenure as a public company. How could a company be trading at such a high**

**stock price, but report negative earnings consistently? Because investors speculate and believe there**

**is potential for high growth in the future.** It is not just the United States that is experiencing a boom in green technology. Both

**the German and Chinese governments have offered subsidies to expand solar panel production. These**

**countries experienced the boom of solar panels, but also the bust of the bubble. Companies saw great**

**opportunities in this area through government subsidies, which increased supply, followed by a price**

**downfall and bankruptcies.** Currently, China is able to export green products cheaply to other countries because of subsidies and low

labor costs, making green technology companies around the world uncompetitive. **The companies of the United States need**

**to differentiate themselves through innovative technologies and business models. The boom in green**

**technology that the world has felt could have important influences on the global economy and**

**environment.** As more countries begin to use green technology, the world will be reducing emissions and improving the environment.

Also, as new technology and businesses are formed, job openings and growth in the economy could occur. **Could the boom in green**

**technology experience be a bust, as many other booms in the past? Yes, countries such as China and**

**Germany have already experienced the bust portion of this economic cycle, and it is very possible for**

**the United States to follow the in the same footsteps. The United States has already seen an oil boom**

**with the introduction of hydraulic fracking.** The economic cycles of bubbles booming and busting have been experienced by

economies around the world. Investors have felt excitement in the dot-com boom, **but have also felt the bust of the housing**

**market, which sent the economy into a rapid recession. As green tech companies begin to gain**

**popularity, they could become the next big bubble or the next big bust.** There are signs of a green tech bubble

throughout the global economy, including individual companies such as Tesla, solar panels in China and Germany, and hydraulic fracking in the

United States.

## **Climate mitigation strategies hurts the economy – laundry list**

### **Climate mitigation policies hurt economic growth – carbon capture proves**

**Victor 11** (Peter A. Victor is a Professor in Environmental Studies at York University and a member of the Advisory Council of the Royal Canadian Institute for the Advancement of Science. He was the founding President of the Canadian Society for Ecological Economics and is a member of the David Suzuki Foundation and Advisory Committee on the National Accounts for Statistics Canada –“Growth, Degrowth and climate Change” [http://degrowth.org/wp-content/uploads/2011/05/Victor\\_Growth-Degrowth-and-Climate-Change.pdf](http://degrowth.org/wp-content/uploads/2011/05/Victor_Growth-Degrowth-and-Climate-Change.pdf))

However, the fact that changes in GDP are used to assess climate change costs and policies cannot be denied. Tol (2009) provides a summary of 13 estimates of the “welfare impact of climate change expressed as an equivalent income gain or loss in percent GDP” (p. 31). **Others have estimated the costs in terms of climate change mitigation and adaptation in terms of an actual reduction in GDP, expressing views such as “In an economy that is growing at 2.5% per year, a rate that is common for developed countries, spending 2.5% of GDP on climate protection each year would be equivalent to skipping one year's growth, and then resuming. Average incomes would take 29 years to double from today's level, compared to 28 years in the absence of climate costs.”** (Ackerman, et al., 2009, p. 5), or as Stern (2007) writes: “...one can think of annual GDP being 1% lower through time, with the same growth rate, after an initial adjustment” (p. 249). This allowed Stern (2007) to conclude that “an annual cost rising to 1% of GDP by 2050 poses little threat to standards of living, given that economic output in the OECD countries is likely to rise in real terms by over 200% by then, and in developing regions as a whole by 400% or more.” (p. 239). The relationship between the costs of climate change mitigation and adaptation, and the rate of economic growth depends very much on what other expenditures are displaced. The use of the additional output of the economy from 1 year to the next is fundamental in determining its rate of growth. For example, **if there is a significant reduction in investment in new productive capacity because funds are diverted to unproductive climate mitigation, such as carbon capture and storage yielding no marketable output, it is implausible to assume that the rate of economic growth will be unaffected. To suggest that there will be essentially no effect on the growth rate even when climate mitigation and adaptation costs as a percentage of GDP are similar to the growth rate is unreasonable and unconvincing** (Jackson, 2009, pp. 83–85).

### **Climate regulations will hit the manufacturing sector especially hard—hurts U.S. competitiveness**

**Loris**, Fellow in Energy and Environment at the Heritage Foundation, **2014** (Nicolas, with Filip Jolevski, The Heritage Foundation, “EPA’s climate regulations will harm American manufacturing,” March 4, <http://www.heritage.org/research/reports/2014/03/epas-climate-regulations-will-harm-american-manufacturing>, last accessed 6.4.14 RG)

**America’s manufacturing base will be particularly harmed by the EPA’s climate regulations. Manufacturing accounts for over 330,000 of the jobs lost.**[4] This occurs for a number of reasons.

**As more coal generation is taken offline, the marketplace must find a way to make up for that lost supply.** The Heritage Energy Model builds in the most cost-effective means of replacing the lost coal through a combination of consumers decreasing energy use as an adjustment to higher prices and increased power generation from other sources.

**Manufacturing is an energy-intensive industry, and the impact of the higher energy prices on manufacturing averages to more than 770 jobs losses per congressional district. However, not all regions are affected the same, as districts in Wisconsin, Ohio, Indiana, Michigan, and Illinois are especially hit hard.**

In fact, 19 out of the top 20 worse off congressional districts from the Administration's war on coal are located in the Midwest region. In those districts, the manufacturing industry, on average, will slash more than 1,600 jobs by 2023. The table at the end of the paper shows the estimates of the decrease of manufacturing employment per congressional district by 2023.

Furthermore, manufacturing growth will be harmed as a result of the fuel switching that will occur to make up for lost coal generation. Natural gas will be diverted away from manufacturing and to power generation. As a result, the Heritage Energy model projects that natural gas prices will increase 28 percent by 2030.

Natural gas and liquids produced with natural gas provide a feedstock for fertilizers, chemicals and pharmaceuticals, waste treatment, food processing, fuel for industrial boilers, transportation fuel, and much more. The chemical-manufacturing base alone is building 148 new operations topping over \$100 billion in response to current and projected low natural gas prices from the shale gas boom.[5] As the U.S. is experiencing a renaissance in manufacturing and energy-intensive industries, the Administration's war on coal could adversely affect America's competitive advantage.



## **Environment regulations hurt growth – climate regulations prove**

**Climate change policies hurt the economy—higher energy prices would lead to unemployment, lower consumption**

**Loris**, Fellow in Energy and Environment at the Heritage Foundation, **2014** (Nicolas, The Heritage Foundation, “Climate change: A Cure worse than the disease,” May 12, <http://www.heritage.org/research/commentary/2014/5/climate-change-a-cure-worse-than-the-disease>, last accessed 6.1.14 RG)

**What's most troubling is, even if climate change were occurring at an unsustainable rate, the administration's policy prescriptions will not fix anything but will further harm the economy.**

**The proposed limits for carbon dioxide emissions essentially would prohibit the construction of new coal-fired power plants and force existing ones into early retirement, driving up the cost of energy on American families and businesses. Higher energy prices shrink production in consumption, resulting in less income for families, more people in the unemployment line and less economic growth.** And even if we were to stop emitting greenhouse gas emissions entirely, we would not moderate the Earth's temperature more than a few tenths of a degree Celsius by the end of the century.

## **Environmental regulations hurt growth – and the environment**

**Adler 2008** (Jonathono, Professor of Law and Director Center for Business Law and Regulation at Case Western University, “Bridge to Nowhere,” <http://www.thenewatlantis.com/publications/green-bridge-to-nowhere//Mkoo>)

**The first item on his agenda is the replacement of modern capitalism with some undefined “non-socialist” alternative.** “The planet cannot sustain capitalism as we know it,” he warns, calling for a fundamental transformation. **But he does not understand the system he wants to reform, let alone what he would substitute in its place.** **According to Speth, “most environmental deterioration is a result of systemic failures of capitalism.”** This is an odd claim, as **the least capitalist nations of the world also have the worst environmental records.** **The ecological costs of economic statism are far worse than those of economic liberty.** **The environmental record of the various Soviet regimes amply bears this out: The West’s ecological nightmares were the Soviet bloc’s environmental realities. This is not due to any anomaly of the Soviet system.** **Nations with greater commitment to capitalist institutions experience greater environmental performance.** While Speth occasionally acknowledges pockets of environmental progress, he hardly stops to consider the reasons why some environmental resources have been conserved more effectively than others. **Fisheries are certainly declining throughout much of the world—some 75 percent of fisheries are fully or over-exploited—but not everywhere.** **It is worth asking why. Tropical forests in less-developed nations are declining even as most temperate forests in industrialized nations are rebounding.** **Recognizing these different trends and identifying the key variables is essential to diagnosing the real causes of environmental deterioration and prescribing a treatment that will work.** Speth acknowledges that **much of the world is undergoing “dematerialization,” such that economic growth far outpaces increases in resource demand,** but seems not to appreciate how **the capitalist system** he decries **creates the incentives that drive this trend.** **Were it not for market-driven advances in technological capability and ecological efficiency, humanity’s footprint on the Earth would be far greater.** While **modern civilization** has developed the means to effect massive ecological transformations, **it has also found ways to produce wealth while leaving more of the natural world intact.** **Market competition generates substantial incentives to do more with less—thus in market economies we see long and continuing improvements in productive efficiency. This can be seen everywhere from the replacement of copper with fiber optics (made from silica, the chief component in sand) and the light-weighting of packaging to the explosion of agricultural productivity and improvements in**

**energy efficiency. Less material is used and disposed of, reducing overall environmental impacts from productive activity. The key to such improvements is the same set of institutional arrangements that Speth so decries: property rights and voluntary exchange protected by the rule of law—that is, capitalism.** As research by Wheaton College economist Seth Norton and many others has shown, **societies in which property rights and economic freedoms are protected experience superior economic and environmental performance than those societies subject to greater government control.** Indeed, **such institutions have a greater effect on environmental performance than the other factors,** such as population growth, that occupy the attention of Speth and so many other environmental thinkers. Speth complains that capitalism is fundamentally biased against the future; but the marketplace does a far better job of pricing and accounting for future interests than the political alternative. “Future generations cannot participate in capitalism’s markets [today],” says Speth. Fair enough, but they cannot vote or engage in the regulatory process either. Thus the relevant policy question is what set of institutions does the best—or least bad—job of accounting for such concerns, and here there is no contest. However present-oriented the marketplace may be, it is better able to look past the next election cycle than any plausibly democratic alternative.

## **Regulations and lack of economic freedom hinder economic growth**

**The Heritage Foundation Economic Freedom Task Force, 2012 (“America’s Global Agenda for Economic Freedom” Special Report #101 on Economic Freedom February 17, 2012<http://www.heritage.org/research/reports/2012/02/americas-global-agenda-for-economic-freedom>)**

**The greatest threat to U.S. prosperity is the decline in economic freedom in the United States. In 2010, for the first time ever, the United States fell from the ranks of the economically free in the Index of Economic Freedom,** published annually by The Heritage Foundation and *The Wall Street Journal*. **In 2012, the U.S. score dropped again, with the U.S. falling to 10th place. This reduction in economic freedom has been accompanied by a stagnant economy, persistently high unemployment, and lethargic economic growth. Promoting economic freedom in the United States is essential to growing the economy and creating jobs for Americans.** However, promoting economic freedom abroad is also important for revitalizing the U.S. economy. America is a global economic power. Encouraging the free flow of goods, services, people, and ideas around the world contributes to American prosperity. Americans need ambitious policies that promote economic freedom worldwide, policies that create economic dynamism, and the continual innovation that leads to better products, new markets, and greater investment.

# Environmental regulations kills jobs

## **Environmental regulations kills jobs**

**NAM 12** (National Association of Manufacturers. "Manufacturers: EPA Regulations Will Severely Harm Economic Growth." Manufacturers EPA Regulations Will Severely Harm Economic Growth. N.p., 28 Nov. 2012. Web. 17 July 2014. <<http://www.nam.org/Communications/Articles/2012/11/Manufacturers-EPA-Regulations-Will-Severely-Harm-Economic-Growth.aspx>>. The National Association of Manufacturers (NAM) is an advocacy group headquartered in Washington, D.C., United States, with 10 additional offices across the country. It is the nation's largest industrial trade association, representing 11,000 small and large manufacturing companies in every industrial sector and in all 50 states.[1] Fred/John/Eric).

The National Association of Manufacturers (NAM) today released a new study, A Critical Review of the Benefits and Costs of EPA Regulations on the U.S. Economy, which finds six major Environmental Protection Agency (EPA) regulations will cost manufacturers hundreds of billions of dollars and cause the loss of several million jobs. The study, conducted by ndp|consulting, also finds these regulations will produce negative net benefits to society.¶ "This study clearly illustrates the layer upon layer of regulations that are weighing down manufacturers' ability to help lead our country's economic recovery," said NAM President and CEO Jay Timmons. "If we don't return to a more sensible regulatory process, then manufacturers will face even higher energy prices, skyrocketing compliance costs, less investment opportunities and significantly fewer jobs. A devastating ripple effect will be felt throughout our entire economy, causing some manufacturers to close their doors for good."¶ The study examines the cumulative impact of the EPA's final Utility MACT and Boiler MACT rules, its still-pending Coal Combustion Residuals and Cooling Water Intake Structures regulations, and its expected Cross-State Air Pollution Rule and National Ambient Air Quality Standards for Ozone on the U.S. economy.¶ Key findings of the report include the following:¶ • The annual compliance costs for all six regulations range from \$36 billion to \$111.2 billion (by EPA estimates) and from \$63.2 billion to \$138.2 billion (by industry estimates).¶ • The total capital expenditures for all six regulations range from \$174.6 billion to \$539.3 billion (by EPA estimates) and from \$404.5 billion to \$884.5 billion (by industry estimates).¶ "In the past 30 years, more than 2,000 regulations have been imposed on manufacturers," added Timmons. "It is already 20 percent more expensive to manufacture in the United States compared to our largest trading partners, and more regulations from Washington are only digging the hole deeper. As policymakers make critical decisions on the fiscal cliff and the challenges facing manufacturers, it's important they understand the enormous impact of existing and pending regulations on manufacturers' ability to grow and create jobs."

## Ocean zoning - hurt economy

### Implementation of ocean zoning policy guts investment in ocean development

#### Hastings 12

— representative in the House of Representatives of Congress, chairman of the House Natural Resources Committee, The Natural Resources Committee has jurisdiction over most federal land use and water policies, including national forests, national parks and monuments, wilderness areas, national scenic areas, Indian reservations, BLM lands, fisheries and oceanography [Doc “Obama’s national ocean policy threatens jobs and economic activities onshore and off” <http://www.foxnews.com/opinion/2012/06/19/obama-national-ocean-policy-threatens-jobs-and-economic-activities-onshore-and/>, June 19, 2012 accessed 7/19/14] JW

In the famous poem “Paul Revere’s Ride,” Revere instructs his fellow patriots to use lanterns to signal whether there’s an attack coming by land or sea. While we may no longer have to fear the British, Americans should be warned of a new threat coming by sea in the form of President Obama’s National Ocean Policy and ocean zoning initiative.¶ President Obama is using the ocean as his latest regulatory weapon to impose new bureaucratic restrictions on nearly every sector of our economy. While marketed as a common sense plan for the development and protection of our oceans, it is instead being used to create a massive new bureaucracy that would harm our economy.¶ Established through Executive Order, Mr. Obama with a simple stroke of a pen took unilateral action to impose a massive top-down federal bureaucracy with broad regulatory control over our oceans, Great Lakes, rivers, tributaries and watersheds.¶ The Executive Order creates a tangled web of regulatory layers that includes: 10 National Policies; a 27-member National Ocean Council; an 18-member Governance Coordinating Committee; and 9 Regional Planning Bodies. This has led to an additional: 9 National Priority Objectives; 9 Strategic Action Plans; 7 National Goals for Coastal Marine Spatial Planning; and 12 Guiding Principles for Coastal Marine Spatial Planning.¶ **Imposing mandatory ocean zoning could**

**place huge portions of our oceans and coasts off-limits, seriously curtailing recreational activities, commercial fishing, and all types of energy development – including renewable energy such as offshore wind farms.¶ What’s even more alarming is that the impact of this Executive Order is not limited to just our oceans. It establishes regional planning bodies with the authority to regulate as far inland as necessary. All rivers eventually drain into the ocean, which gives this policy the justification it needs to reach far inland.**¶ For example, the Gulf of Mexico Regional Planning Body will make decisions to regulate activities throughout the entire Mississippi River watershed if those activities have the potential to affect the Gulf of Mexico. This means a policy billed as protecting our oceans will have the ability to regulate inland activities that occur as far north as Minnesota. If farmers and ranchers thought having the EPA in their backyard was bad, wait until the National Ocean Council comes sailing upstream for a visit too.¶ The American Farm Bureau Federation has raised serious concerns, stating that “it could extend to the regulation of every farm and ranch in the United States.”¶

**To make matters worse, taxpayers will be stuck with the considerable financial costs of implementing this Executive Order and the vague and undefined objectives will no doubt be used as fuel for costly frivolous lawsuits to stop or delay federally-permitted activities. Adding to these costs is the lost economic activity and stifled job creation that will result from new restrictions and regulatory uncertainty brought on by the policy.**¶

## **Regulations hurt economy – small business**

### **Small business regulatory burden – hurts economy**

**Danner, 2013** ( Dan, “Stop overregulating businesses: Opposing view” USA today July 24, 2013<http://www.usatoday.com/story/opinion/2013/07/24/national-federation-of-independent-business-regulations-editorials-debates/2585147/>)

**One of the top concerns we hear from our 350,000 small-business members is how discouraged they are by the tidal wave of new rules and regulations imposed on them by the federal regulatory machine. Persistent small-business pessimism and lagging job creation is, without a doubt, related to their sense of regulatory suffocation. A new McKinsey Global Institute study finds that the U.S. might be losing its economic edge and falling behind its competitors due, in part, to our regulatory climate. According to McKinsey, U.S. business executives say that "permitting, regulation and taxes are increasingly impediments to investing in the United States." Of the more than 3,500 federal regulations rushing through the federal pipeline, 202 are considered to have a major economic impact and 739 directly target small businesses. These edicts not only arrive in great numbers, they also hit virtually every aspect of small firms — taxes, health care, labor, environment, safety and much more.**

## **Regulations hurt economy – job loss**

### **EPA regulations out-of-control & hurting the economy – specifically kills jobs**

Zelnak, (Steve Zelnak, former CEO of Martin Marietta Materials, Inc) '12

[“Out-of-Control EPA Is Hurting the Economy” USNews Economic Intelligence, 6/1/12,  
<http://www.usnews.com/opinion/blogs/economic-intelligence/2012/06/01/the-epa-is-not-the-fourth-branch-of-government> accessed: 7/18/14]

We spend more than \$350 billion on oil imports per year, or over half of our annual trade deficit. We have no cohesive energy policy, and what we have is not focused on U.S. self-sufficiency even though we have over 100 years of natural gas and coal reserves and rapidly increasing oil reserves.¶ Instead, the focus of the Environmental Protection Agency is to eliminate coal as a fuel by creating a set of air regulations that are driven much more by political ideology than by science. The coal mining industry in the United States employs 1.16 million people. In effect, the Environmental Protection Agency, known as the EPA, is intent on eliminating many of these high paying jobs with the mantra that they will be replaced by alternative energy jobs. The recent history of solar investments (and bankruptcies) by the federal government offers little comfort that such will be the case.¶ With the huge increase in natural gas and oil reserves through fracking and horizontal drilling, the EPA is intent on involving itself in what has been a state issue by making a bold, two-fisted grasp for regulatory power. The results of this, if allowed, are predictable. The agency will continue to try to eliminate fossil fuel use regardless of cost to the consumer and regardless of job destruction.

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## Environmental regulations kills productivity

### **Environmental regulations hurt productivity and costs manufacturing plants**

Greenstone et al' (Michael Greenstone, Professor of Environmental Economics in the Department of Economics at the Massachusetts Institute of Technology, John A. List, The Homer J. Livingston Professor in Economics and the Chairman of the Department of Economics at the University of Chicago, Professor of Economics at University of Chicago) '12

["The Effects of Environmental Regulation on the Competitiveness of U.S. Manufacturing" MIT Center for Energy and Environmental Policy Research, September 2012,  
<http://web.mit.edu/ceepr/www/publications/workingpapers/2012-013.pdf> accessed: 7/18/14]

The economic costs of environmental regulations have been widely debated since the U.S. began to restrict pollution emissions more than four decades ago. Using detailed production data from nearly 1.2 million plant observations drawn from the 1972-1993 Annual Survey of Manufactures, we estimate the effects of air quality regulations on manufacturing plants' total factor productivity (TFP) levels. We find that among surviving polluting plants, stricter air quality regulations are associated with a roughly 2.6 percent decline in TFP. The regulations governing ozone have particularly large negative effects on productivity, though effects are also evident among particulates and sulfur dioxide emitters. Carbon monoxide regulations, on the other hand, appear to increase measured TFP, especially among refineries. The application of corrections for the confounding of price increases and output declines and sample selection on survival produce a 4.8 percent estimated decline in TFP for polluting plants in regulated areas. This corresponds to an annual economic cost from the regulation of manufacturing plants of roughly \$21 billion, which is about 8.8 percent of manufacturing sector profits in this period.

### **Regulations hurt productivity – empirical regulation pattern**

**Lanoie et al 11** – professor at HEC Montreal, Ph.D. in economics from Queen's University [Paul, "Environmental Policy, Innovation and Performance: New Insights on the Porter Hypothesis", Journal of Economics & Management Strategy, Volume 20, Number 3, Fall 2011, accessed 7/18/14] JW

Porter is not very precise about what he means by innovation; investments can be perceived as a proxy of how companies integrate new technology. In this vein, two studies find a negative relationship between environmental regulations and investment in physical capital. Nelson et al. (1993) found that air pollution regulations significantly increased the age of capital in U.S. electric utilities in the 1970s, with the age of capital assumed to be negatively related with environmental performance. According to Gray and Shadbegian (1998, 2003), more stringent air and water regulations have a significant impact on U.S. paper mills' investment decisions, encouraging investment in "cleaner" production technologies. However, their results suggest that such investment tends to divert from productive investment, reducing productivity. This is consistent with the standard paradigm.

## **Policies addressing climate change hurt economic growth -**

**Climate policies limit economic growth – and disproportionately harm developing countries growth**

**Dercon, 2014**

(Stefan, Policy Research Working Paper 6936 “Is Green Growth Good for the Poor?” June 24 2014  
[http://www.wds.worldbank.org/servlet/WDSCContentServer/WDSP/IB/2014/06/24/000158349\\_20140624092056/Rendered/PDF/WPS6936.pdf](http://www.wds.worldbank.org/servlet/WDSCContentServer/WDSP/IB/2014/06/24/000158349_20140624092056/Rendered/PDF/WPS6936.pdf) accessed tm 7/16)

**All of these processes will be exacerbated as the pressures to reduce greenhouse emissions lower global growth, with impacts on the export demand of these transforming economies and therefore on jobs and income growth. These poor and emerging economies will also face pressures to reduce their own emissions, thus also reducing growth opportunities. Indirect effects could also arise as pressures for the global reduction of greenhouse gas emissions impose costs on the world economy, thereby limiting global GDP growth and affecting both the demand and for poorer countries' exports and their income growth. Furthermore, although poor countries generally have much lower greenhouse gas emissions than do higher income countries, there is likely to be increasing pressure to force low-income countries to curb their emissions as well. This would further increase the costs of transformation to a higher-return economy. Finally, climate change is only one source of environmental pressure that has serious impacts in many developing countries and elsewhere. Curbing environmentally damaging activities to safeguard natural resources for the future as well as the population's health and the quality of life will divert resources from growth-oriented opportunities and impose further costs on their economies and current economic growth opportunities.**



**Link turn debate – X helps the economy**

## **Ocean protection and regulation helps the economy**

### **Ocean protection key to sustainable development**

**Visbeck, et al. 2014** (Martin, "Securing blue wealth: the need for a special sustainable development goal for the ocean and coasts." *Marine Policy* 48 (2014): 184-191. Sciencedirect accessed tm 7-16)

Services provided by the ocean are of direct economic relevance for sectors like fisheries, aquaculture, offshore oil and gas mining, shipping, tourism and – potentially in the future – deep seabed mining for mineral resources. Estimates for the value provided by the ocean-based economy range from 1 to 5 percent of GDP for developed countries [5]. In many developing countries, these shares are considerably larger, for example in Mauritania and Vietnam with about 12.5 percent and 10 percent of GDP respectively [6], [7]. Furthermore, these shares increase considerably if the contributions of the coastal economy are considered [5]. Even though the coastal economy does not necessarily rely on ocean services as inputs, a healthy ocean is a prerequisite for a stable coastal economy which provides tax revenues and indirect economic and social benefits by, for example, community identity [8].

### **Overexploitation of the environment as a result of growth in the developed world destroys developing countries' economies, now is key to transition towards a blue economic focus**

**SIDS 14** [UN INTERNATIONAL CONFERENCE ON SMALL ISLAND DEVELOPING STATES (SIDS) 2014, <http://www.sids2014.org/content/documents/275BEconcept.pdf>, accessed 7/17/14]RMT

The natural world made up of the physical environment, its mineral components and biodiversity at all three levels (genetic, species, ecosystem) is intrinsically interconnected and the more diverse and productive the natural system, the greater the degree of interconnectivity. Hence the identification of particular issues is inherently an anthropogenic construct and depending on one's perspective may appear arbitrary. A case in point is the precursory role that the conservation and sustainable use of biodiversity has in enabling the establishment of a Blue Economy, broader sustainable development and poverty eradication (see fig below). This is particularly true in developing countries where economies are more directly related to environmental exploitation. Equivalent figures, to that above, could be developed for the other issues, underlining the overall interconnectivity and the need for an integrated and holistic approach. To this end the ecosystem approach must underpin all aspects of the Blue Economy incorporating interrelationships, knock-on effects, externalities and the true costs and benefits of activities in terms of the natural blue capital. The natural capital of many marine and coastal ecosystems has been degraded, impacting upon the provision of services and livelihoods. Approximately 20% of the world's coral reefs have been lost and another 20% degraded 5 . Mangroves have been reduced to 30-50% of their historical cover and it is estimated that 29% of seagrass habitats have disappeared since the late eighteen hundreds 6 . An ecosystem approach is required that factors in restoration of biodiversity and renewable resources, and proper management of resource extraction. For example in fisheries, some of the renowned "Sunken Billions" 7 could be restored providing the basis for productive, efficient, sustainable fisheries and enhanced food security. The scientific determination and designation of appropriate MPAs can play a key role in this regard reconstituting biodiversity, ecosystem services and general resilience to other system shocks.

Currently only some 2% of our oceans are protected, despite the CBD/WSSD 2012 target of a representative 10% area, whereas approximately 12% of terrestrial areas are under protection.

### **The blue economy solves warming – should increase ocean development**

**SIDS 14** [UN INTERNATIONAL CONFERENCE ON SMALL ISLAND DEVELOPING STATES (SIDS) 2014, <http://www.sids2014.org/content/documents/275BEconcept.pdf>, accessed 7/17/14]RMT

**d). Climate change and managing carbon budgets. Sea level rise and change in ecosystem status due to changing temperatures, from coral bleaching to impacts upon migration patterns, have been discussed at length in diverse international fora and need not be re-stated here. Relatively new issues on the agenda, however, are Ocean Acidification and Blue Carbon.** · Acidification: Oceans are estimated to have absorbed approximately 25% of anthropogenic carbon dioxide since the commencement of the industrial revolution **resulting in a 26% increase in the acidity of the Ocean** 12 . **Ocean acidification is known to have a significant impact; many organisms show adverse effects, such as reduced ability to form and maintain shells and skeletons, as well as reduced survival, growth, abundance and larval development. Acidification will also affect carbon accretion in coral reef building organisms causing net decreases in global coral reef coverage and associated species. Projections suggest that pH for the more vulnerable ocean regions could reach the aragonite tipping point within decades changing the very chemistry of ecosystems with potentially disastrous effects. As ocean acidity increases, its capacity to absorb carbon dioxide from the atmosphere decreases, thereby reducing the ocean's capacity to moderate climate change. There is currently no international mechanism to specifically address acidification, appropriate means need to be elaborated to enable coordinated international action.** · Blue Carbon: Several key coastal habitats such as mangroves, salt marshes and sea grass meadows have been found to fix carbon at a much higher rate per unit area than land based systems and be more effective at the long-term sequestration of carbon than terrestrial forest ecosystems 13 . Mangroves have been reduced to 3050% of their historical cover and 29% of seagrass habitats are estimated to have been lost in the last 150 years 14 . This carbon sequestration role re-emphasizes the importance of maintaining, and where possible rehabilitating, such ecosystems as an opportunity for ecosystem climate mitigation and to also including them in carbon trading mechanisms. The Blue Economy approach will set in place the policies, legislation, infrastructure and incentives to facilitate the transition to a low carbon economy utilising all the tools at its disposal including the ocean's enormous potential for renewable energy (wind, wave, tidal, thermal and biomass) generation

## **Aquaculture boosts economy**

### **Aquaculture solves food security and is key to growth**

**SIDS 14** [UN INTERNATIONAL CONFERENCE ON SMALL ISLAND DEVELOPING STATES (SIDS) 2014, <http://www.sids2014.org/content/documents/275BEconcept.pdf>, accessed 7/17/14]RMT

Aquaculture is the fastest growing global food sector now providing 47% of the fish for human consumption 26 . Fish used for human consumption grew by more than 90 million tonnes in the period 1960-2009 (from 27 to 118 million tonnes) and aquaculture is projected to soon surpass capture fisheries as the primary provider of such protein. To maintain its viability and growth without undermining wild fisheries the aquaculture industry must actively reduce the proportion of industrial fish in fishmeal. Progress is being made however; fishmeal is increasingly being produced from fishery by-products - which now constitute over 25% of global production 27 . Research indicates that at least 50% of fishmeal and 50-80% of oil in salmonid (the largest component of aquaculture production) and 30-80% off fishmeal and up to 60% of oil in marine fish diets can ultimately be replaced with vegetable substitutes greatly increasing the scope for industry expansion 28

### **Aquaculture good – solves economic development .**

**SIDS 14** [UN INTERNATIONAL CONFERENCE ON SMALL ISLAND DEVELOPING STATES (SIDS) 2014, <http://www.sids2014.org/content/documents/275BEconcept.pdf>, accessed 7/17/14]RMT

In the context of the Blue Economy food security is very closely related to the sustainable use of biodiversity particularly where it pertains to the exploitation of wild fisheries. 1 billion people in developing countries depend on seafood for their primary source of protein “We are deeply concerned that one in five people on this planet, or over 1 billion people, still live in extreme poverty, and that one in seven — or 14 per cent — is undernourished...” (Para 21. The future we want. UNCSD 2012) Aquaculture offers huge potential for the provision of food and livelihoods, though greater efficiencies in provision of feed to aquaculture need to be realised, including reduced fish protein and oil and increased plant protein content, if the industry is to be sustainable. Aquaculture under the Blue Economy will incorporate the value of the natural capital in its development, respecting ecological parameters throughout the cycle of production, creating sustainable, decent employment and offering high value commodities for export. c). Unsustainable Fisheries The proportion of marine fish stocks estimated to be underexploited or moderately exploited declined from 40% in the mid-1970s to 15% in 2008, and the proportion of overexploited, depleted or recovering stocks, increased from 10% in 1974 to 32% in 2008 . Fishing fleet subsidies are estimated to be between US\$ 10-30 billion per year driving the further depletion of fisheries that have otherwise ceased to be economically viable. The benefits lost to fishing nations as a consequence of over fishing are estimated to be in the order of US\$ 50 billion per annum 10 . Aquaculture is the fastest growing food sector now providing 47% of the fish for human consumption globally 11 . The last three decades have seen massive expansion in aquaculture operations raising concerns of environmental damage and unsustainable development models. Aquaculture sites have often been carved out of important natural coastal habitats with rapid expansion exceeding the capacity of planning controls and oversight. Aquaculture with fed species, if not managed properly, can impact biodiversity and ecosystem functions through excessive nutrient release, chemical pollution and the escape of farmed species and diseases into the natural environment. It is essential that integrated ecosystem

**approaches are utilised in wild capture fisheries and aquaculture based on the best current scientific information with judicious application of the precautionary approach, and subsidies that encourage overfishing are removed.**

## Climate policies help the economy

**Climate policy would help the economy by increasing green investment—companies are already planning for it**

**Monsma**, Executive Director of the Aspen Institute's Energy and Environment Program, **2014** (David, The Huffington Post, "Climate Policy: It's the Economy," May 16, [http://www.huffingtonpost.com/david-monsma/carbon-tax\\_b\\_5332929.html](http://www.huffingtonpost.com/david-monsma/carbon-tax_b_5332929.html), last accessed 6.3.14 RG)

President Obama has taken more action on climate change than any president before him. It could not be put more clearly: "Climate change is a fact." Regardless, the great national anxiety and confusion -- about where we get our energy, how it is produced and its impact on the environment -- needs to end. **Congress should act, but in the face of their polarization and dysfunction, action by presidential order is warranted.**

Ham-fisted climate denial is still a profound political reality on the Hill, and profitable for K Street. There is no reason to expect a new or sincere Congressional discussion about economy-wide legislation to manage or limit greenhouse gases any time soon. For that to happen, the Congressional leadership would need to realize that managing carbon is not an ideological "Obama" ploy or hoax as trumpeted nightly by some cable news programs and late night AM radio talk shows. A national legislative response to climate change in the form of a carbon price would be the beginning of an unprecedented economic opportunity already grasped but unspoken by a significant number of investors and operating companies in the United States. Whether it takes the form of a fee, a tax, or cap and trade scheme doesn't much matter. The president, for his part, is utilizing the power of the executive office to achieve greater energy efficiency, curb carbon pollution, and seek "a smarter tax policy that stops giving \$4 billion a year to fossil fuel."

**The truth is that most large operating companies with a fossil fuel footprint already manage and price their carbon emissions, many with enough reduction credits to make it profitable to do so. Dozens of the nation's biggest corporations -- including big oil -- plan for future growth while fully expecting to pay a price for carbon pollution to slow down global warming. Airlines, energy companies, the transportation sector, appliance makers, homebuilders, and others, all realize that the success of our economic and energy future lies in part with how we manage and price carbon emissions.**

**The message from business to Congress is this: Let market forces go to work on carbon pollution. We know carbon limits will come; give us some certainty so we can plan. We are missing out on one of the greatest economic and environmental opportunities to come along in decades.**

Regulating or taxing carbon emissions is no longer a partisan or ideological issue -- it's a matter of business and investment, and of vital importance. **A tax or fee on greenhouse gas emissions can begin to unlock the investment in the clean energy technology and innovation necessary to at least curb some of the most negative impacts of global warming and climate change.**

**And regardless of where you stand on the Keystone XL Pipeline or natural gas or drilling in the Arctic, both the economy and the environment will change for the better when Congress acts and the market is used to price the potential risks of climate change related to fossil fuel use.**

**Climate change policies will help the economy in a long-run—climate change is already hurting us**

**Brodwin**, Cofounder and Board Member of American Sustainable Business Council, **2013** (David, U.S.

News, "Helping the Economic Climate," June 25, <http://www.usnews.com/opinion/blogs/economic-intelligence/2013/06/25/obamas-new-climate-change-plan-will-help-the-economy>, last accessed 6.4.14 RG)

Stabilizing the climate by reducing carbon omissions saves the economy much more than it costs. Climate change is already reducing U.S. gross domestic product by 1.6 percent per year, and this will rise to 2 percent by 2030, according to a recent study from the international nonprofit humanitarian group DARA. Two percent of GDP may not seem like a lot, but it's the difference between a robust booming economy and a recession.

The business case for cutting carbon emissions is strong. Interestingly, much of the analysis comes from the insurance industry itself, no hotbed of environmentalist sentiment. Leading insurance companies like Swiss Re have been ringing alarms for several years now. For example, Peter Hoppe, head of Geo Risks Research for insurance giant Munich Re says numerous studies predict "a rise in summer drought periods in North American ... and an increasing probability of severe cyclones relatively far north along the U.S. East Coast." These consequences cost billions of dollars in economic damage, lost growth and lost jobs. Frank Nutter, president of the Reinsurance Association of America, echoes the concern.

The damage from climate change doesn't stop at the coastline. The Midwest will experience crop damage and lower yields per acre due to wider temperature swings, droughts and severe storms that flood farms and fields. "Crop insurance losses from last year's drought alone cost every person in America \$51" according to Mindy Luber, president of Ceres, which recently compiled a comprehensive tally of the likelihood of climate change-related damages.

Declines in crop yield of over 10 percent are anticipated in some areas, due to higher temperatures. Already, vital aquifers that supply water to the Midwest and California's central value are shrinking due to decreased rainfall and increased pumping. The cost of electricity to pump water from hundreds of feet underground cuts into farmers' incomes and raises food costs.

The insurance industry in the United States is not yet a strong advocate for policy change but it will be if the federal government stops reimbursing farmers for crop losses and stops offering disaster relief for businesses in coastal flood zones. These federal insurance programs encourage people to farm and build in unsuitable areas, and they force the public to absorb what are essentially private risks. Both progressive Democrats and tea party Republicans want to scale back farm price support and crop insurance programs, calling on the agricultural industries to pay for their own risks rather than passing the bill to taxpayers.

[See a collection of political cartoons on energy policy.]

The cost of ongoing military security adds to the business case for climate action. The Pentagon recently completed another study of the effects of climate change on America's security and military preparedness. The U.S. armed forces long ago accepted the scientific evidence on climate change and they predict large scale population migration and conflict as rising sea levels and dwindling fresh water threaten the Caribbean basin and south Asia. "Although the effects of climate change alone do not cause conflict, they act as accelerants of instability, which influences our operating environment roles and mission," says Katherine Hammack, assistant secretary of the Army for installations, energy and the environment. All that drives up the cost of defense, expanding the cost of government or forcing cuts in other programs.

Some of the savings from climate protection are indirect. One of the biggest would come from the U.S. reducing its energy needs by less than 15 percent, which would end our reliance on Mideast oil. Under that scenario, the U.S. could greatly reduce the nearly \$200 billion in military costs we incur each year to keep oil from the Middle East flowing our way. In addition, once we

no longer need to prop up Mideast regimes favorable to our energy policies, we will much less subject to terrorist threats emanating from those countries. Then, we can scale back some of our massive spending on homeland security.

**Regulating CO2 emissions needs to start now unless we want to risk grave economic downfall. It is not too late but action needs to be taken immediately.**

**John Podesta 2009**

(Global Warming Toll on the Economy, September 17<sup>th</sup> 2009;

<http://www.americanprogress.org/issues/green/news/2007/09/17/3515/global-warmings-toll-on-the-economy/>, Podesta is John David Podesta was the fourth and final White House Chief of Staff under President Bill Clinton, from 1998 until 2001. He is the former president and now Chair and Counselor of the Center for American Progress, a liberal think tank in Washington, D.C., and is also a Visiting Professor of Law at the Georgetown University Law Center. Podesta was a co-chairman of the Obama-Biden Transition Project.<sup>[3]</sup> and on the Obama administration as a special advisor)

**The science and the economics are conclusive: doing nothing about global warming presents a far greater cost than addressing it. Global warming, if not reversed, will consume our national resources and threaten the well-being of future generations, and volatile energy prices and more extreme weather will devastate our economy.** The urgency of this issue demands a president and a Congress willing to make climate challenge a centerpiece not only of their energy policy but also of their economic program, to produce broad-based growth and sustain American economic leadership in the 21st century. **Society faces mounting physical risks, and businesses face grave financial risks if they fail to adapt to a changing policy climate because of the rapidly changing physical climate. The challenge we face is nothing short of transforming our economy from a high-carbon model—which is putting both our economy and planet at risk—to a low-carbon model that can create new markets and a healthier environment.** The scale of this undertaking is immense and its potential enormous, but time is working against us. We need to move quickly on this. Now, let me emphasize that global warming is emphatically not a partisan issue, and we must never let it become one. It is instead engaging people across the political spectrum, Republicans and Democrats, religious and secular, young and old—perhaps like no other issue we face today. Global warming cuts across old lines of division, and, if we are smart about it, can get us focused on investing in solutions. But although this issue has galvanized many and policies in response to this threat are increasingly inevitable, we still have a lot of work ahead of us. The United Nations' International Panel on Climate Change brought together the largest collection of scientists ever assembled to study global warming, its impacts, and mitigation measures necessary to stop it. In its Fourth Assessment Report, **the IPCC determined that if the world reduces emissions of heat trapping gases down to between 50 percent and 85 percent of 2000 levels by 2050, we have a good probability of limiting the temperature increase to about two degrees Celsius above pre-industrial levels, meaning we would likely prevent the occurrence of the worst impacts of global warming.**In other words, **efforts to reduce global warming pollution must begin now so that we can meet the reduction goal in 2050.** So if we continue to invest in technologies that



do not reflect this reduction imperative, it will be nearly impossible to curb the effects of global warming in what could truly be called a global catastrophe.

## Environmental degradation including climate hurts growth

**Dercon, 2014** (Stefan, Policy Research Working Paper 6936 "Is Green Growth Good for the Poor?"

June 24 2014 <http://www>

[wds.worldbank.org/servlet/WDSCContentServer/WDSP/IB/2014/06/24/000158349\\_20140624092056/Rendered/PDF/WPS6936.pdf](http://wds.worldbank.org/servlet/WDSCContentServer/WDSP/IB/2014/06/24/000158349_20140624092056/Rendered/PDF/WPS6936.pdf) accessed tm 7/16)

Environmental degradation is occurring in many parts of the developing world. Nationally and locally, it is the result of deforestation, soil degradation, the depletion of water resources, and environmental pressures linked to urbanization and economic change. Globally, the overall process of climate change is expected to gradually but sharply increase in the coming decades with mean temperature rises, sea level rises, and spatial changes in rainfall and other climatic conditions as well as the increased frequency or severity of extreme weather events. Environmental change is rarely equity neutral. The poor are generally considered the main losers from both climate change and the burdens of local environmental damage and natural resource degradation. **They are typically more dependent on environmental capital and climate for their economic activities because most of the poor still live in rural areas that are dependent on agriculture. Those in urban areas face the consequences of environmental hazards linked to overcrowding, pollution, and inadequate water and sanitation provision. The poor are also more vulnerable to extreme events affecting economic productivity, health, and security of livelihood** with limited insurance or social protection. Furthermore, informal insurance mechanisms are not suited to address covariate risks such as climate risks or other risks affecting entire communities. **The poor may also find it more difficult to adapt their livelihoods to changing environmental conditions because they lack the resources to invest in appropriate and profitable economic activities. 1 Development and poverty reduction investments are powerful instruments to mitigate these environmental impacts on the well-being of the poor and to offer them the resources to develop their resilience to further environmental pressures. Economic growth and development in the poorest economies is essential to build this resilience to adapt to and cope with the new reality** (World Bank 2010a). It has been the key element in large-scale poverty reduction, most notably in Asia, although there are considerable geographical, sectoral, and structural differences in the speed with which poverty reduction is delivered in the context of growth (Ravallion 2000). **Growth has been found to be important specifically for increased climate change adaptive capacity.** For example, examining time-series data across countries over the last 50 years, Dell et al. (2008, 2009) found that higher temperatures significantly reduced economic growth rates in poor countries but not in rich countries. Raddatz (2009) showed **large declines in GDP per capita from climate-related disasters in low-income countries; in percentage terms, these declines were four times the size of the declines in rich economies. Noy (2009) showed that higher GDP per capita and better institutional and human development indicators reduced losses from climate-related disasters.** Raddatz (2009) also found that the larger impacts in low-income countries are much more than could be explained by the relatively high share of agriculture in these countries, so this issue is not simply solved by diversification away from agriculture. Although they are difficult to

identify statistically, Fomby et al. (2012) also found losses in both agricultural and non - agricultural growth, although the type of shocks appears to affect generalizations on this issue.

## **Fishing regulations help the economy**

Fisheries are key to the economy – overfishing hurts the economy

**SIDS 14** [UN INTERNATIONAL CONFERENCE ON SMALL ISLAND DEVELOPING STATES (SIDS) 2014, <http://www.sids2014.org/content/documents/275BEconcept.pdf>, accessed 7/17/14]RMT

Globally 350 million jobs are linked to marine fisheries, with 90% of fishers living in developing countries. The value of fish traded by developing countries is estimated at US\$ 25 billion making it their largest single trade item. Global catch rose from 4 million tonnes in 1900, through 16.7 million tonnes in 1950, 62 million tonnes in 1980 to 86.7 million tonnes in 2000 but has stagnated subsequently 20 . In 2009 marine capture production was 79 million tonnes. Overall catch risks decline with 75% of stocks fully exploited or depleted . Human activity has directly and markedly reduced ocean productivity; additional deficits may be due to climate change increasing ocean stratification and reducing nutrient mixing in the open seas. Global Ocean Observing System (GOOS) and LME assessments show significant warming trends from which model projections 2040-2060 forecast a steady decline in ocean productivity 22 . The implementation of integrated, ecosystem-based approaches based on the best available science in a precautionary context, plus the removal of fishery subsidies that drive overexploitation offer the prospect of restoring key stocks and increasing catches. It is estimated that 50 US\$ billion per annum is lost to overfishing and could be progressively recovered through stock restoration. The implementation of sound management measures brings the promise of increased sustainable catches, lower energy utilisation and costs; thereby securing livelihoods and enhancing food security. 21

## **Shipping cargo key to economy**

Seaborne trade is key to SIDS countries' economies

**SIDS 14** [UN INTERNATIONAL CONFERENCE ON SMALL ISLAND DEVELOPING STATES (SIDS) 2014, <http://www.sids2014.org/content/documents/275BEconcept.pdf>, accessed 7/17/14]RMT

**80 percent of global trade by volume, and over 70 per cent by value, is carried by sea and handled by ports worldwide. For developing countries, on a national basis, these percentages are typically higher. World seaborne trade grew by 4% in 2011, to 8.7 billion tonnes 18 despite the global economic crisis and container traffic is projected to triple by 2030 19 . Coastal countries and SIDS need to position themselves in terms of facilities and capacities to cater for this growing trade and optimise their benefits. The IMO has brought in new industry wide measures to increase efficiency, reduce greenhouse gas emissions and pollution. More needs to be done to address the issues of IAS from ballast water and hull fouling but even with these challenges maritime trade is set fair for growth and economic benefits whilst reducing impacts, offering expanding Blue employment opportunities for the foreseeable future**



## **Environmental regulation helps the economy – laundry list**

### **Regulations improve environmental performance and make companies more appealing**

**Lanoie et al 11** – professor at HEC Montreal, Ph.D. in economics from Queen's University [Paul, "Environmental Policy, Innovation and Performance: New Insights on the Porter Hypothesis", *Journal of Economics & Management Strategy*, Volume 20, Number 3, Fall 2011, accessed 7/18/14] JW

Given this potential for the existence of "win wins," analysis of the PH is relevant not only for public policymakers, but also for managers of private firms. First, if the "strong" version of the hypothesis is valid, managers could be much less fearful of stricter government intervention with respect to environmental issues, especially if it comes under the form of flexible policy instruments, and this could affect their lobbying strategies. Second, empirical support of the Hypothesis could lead firms to reconsider their processes in order to identify and correct all possible inefficiencies associated with negative environmental impacts. Third, benefits related to a better environmental performance could go far beyond savings in terms of energy expenditures or cost of materials, as implicitly postulated by the PH. Indeed, more and more analysts show that better environmental performance can increase the probability to be chosen as a supplier, it can lead to a better access to financial markets (and thus a lower cost of capital), it can facilitate risk management, or it can ease recruitment and retention of qualified workers (see, for instance, Hoffman, 2000; Willard, 2005; Ambec and Lanoie, 2008).<sup>1</sup> Given the growing importance of environmental issues for businesses and policymakers, given the challenging and controversial nature of the PH, and given the mitigated nature of the empirical results obtained thus far, assessment of the hypothesis remains an important open research question. In this paper, we use a unique database collected by the OECD in 2003 to test the significance of all the links in the causality chain presented above. This database includes observations from approximately 4,200 facilities in seven OECD countries (USA, Canada, Japan, Germany, France, Hungary, and Norway). Data were collected on the perceived stringency of the environmental policy regime, the use of different environmental policy instruments (command-and-control regulation, environmentally related taxes, etc.), R&D expenditures allocated specifically to environmental matters, environmental performance with respect to a number of different impacts, business performance, and a number of control variables.<sup>2</sup> To our knowledge, this is the first study to test all the variants of the PH using data on the four main elements of the causality chain (environmental policies of different types, technological innovation, environmental performance, and commercial performance). The proposed exercise allows us to obtain greater insight on the mechanisms at play, and on the empirical validity of the PH.

## **Research and development policies help economy – competitiveness**

**Government focus combined with research is key to solve the impacts of unsustainable growth**

**SIDS 14** [UN INTERNATIONAL CONFERENCE ON SMALL ISLAND DEVELOPING STATES (SIDS) 2014, <http://www.sids2014.org/content/documents/275BEconcept.pdf>, accessed 7/17/14]RMT

**Each sovereign country is responsible for its own resources and sustainable development. This national responsibility and importance of national policies and development strategies should not therefore be downplayed. The principle of common but differentiated responsibilities, however, still applies. Indeed the need for structured international cooperation underpins all aspects of the Blue Economy. Whether it be with regard to updating and advancing governance mechanisms to ensure the sustainable development of waters beyond national jurisdiction (e.g. maritime security, high seas MPAs, sustainable fisheries, oil and mineral extraction) or assistance in enabling the effective management and utilisation of national EEZs (e.g. technology transfer, technical assistance, marine spatial planning), capacity building, finance to support national marine spatial planning and effective monitoring, control and surveillance). A key component of international cooperation for the Blue Economy approach is Research. A science-based approach is essential to the development of the Blue Economy; commencing with the initial assessment and critically the valuation of the blue capital at our disposal. This will provide a basis for informed decision-making and adaptive management. This major undertaking must be addressed and continually refined and upgraded in line with changing circumstances, evolving technologies and our increasing understanding; or the Blue Economy approach will founder. This underlines the importance of technical assistance, technology transfer and capacity building to the pursuit of sustainable development.**

## **Environmetnal regulations increase jobs – green tech**

**Innovation requires technological lock in—government intervention is required to spur long term growth of green tech in the face of market failures**

**Meltzer 14**--Fellow in Global Economy and Development, Brookings Institution, and adjunct professor at the Johns Hopkins School for Advanced International Studies. This article follows in part upon the author's earlier article. Joshua Meltzer, [Joshua, "A CARBON TAX AS A DRIVER OF GREEN TECHNOLOGY INNOVATION AND THE IMPLICATIONS FOR INTERNATIONAL TRADE", ALLIANCE21, <http://www.alliance21.org.au/about/people/joshua-meltzer>, Apr. 12, 2014, accessed 7/18/14]RMT

**Innovation is not a linear process which starts with R&D spending and inexorably leads to new technologies** that can then be commercialized. Often **the innovation process is more iterative and complex and includes learning-bydoing and regular feedback between the innovators and users of new technologies**. The Organization for Economic Cooperation and Development (OECD) has described the innovation process as a "back-and-forth start-and-stop model" that is "hectic, unscripted and collaborative." 27 For instance, **innovation by businesses often does not commence with R&D but involves problem solving that draws on existing knowledge bases that leads to improvements in business processes or incremental changes to existing technologies**. 28 In contrast, **government-funded R&D in public research institutions and laboratories has been central to producing some of the key breakthrough technologies ranging from nuclear power, to microchips, to the Internet**. 29 This brief description of the innovation process highlights roles for government and business in innovation. Moreover, and as will be discussed in detail, **the development of green technologies will follow different trajectories that will require a range of policies to address a series of market failures which act as barriers to green technology innovation**. In addition to these market failures, the broader environment within which innovation occurs is also important and includes factors such as the overall level of regulation, education, and infrastructure, support for demonstration projects, and whether there is a culture of risk taking. However, addressing the impact of these environmental factors on innovation is outside the scope of this paper. **There is a range of market failures that lead to underinvestment by the private sector in R&D, and this requires government action to encourage a level of innovation that is socially optimal**. 30 One of the **market failures arises when the social value of knowledge from innovation—the positive externalities—is higher than its private returns**. 31 **This arises from the inability of the producers of knowledge to capture all the value, leading to an underinvestment in the R&D process**. One reason for this is that **information, once produced, can be consumed by others, and the value of knowledge and innovation to society increases the more it is used by others**. 33 As **new innovation in technology is incorporated into different production processes, the process of learning-byusing and learning-by-doing can generate dynamic feedback as new knowledge and ways of operating are developed**. 34 Moreover, **the social value of increasing the supply of innovation is particularly high for green technologies, which also address environmental harms, emphasizing the need for government action to address the social costs of such underinvestment**. 35 Another **market failure arises from information uncertainties that lead to suboptimal levels of innovation**. 36 For instance, **uncertainty due to a lack of information and financial expertise to assess the commercial viability of new green technologies leads to underfunding and a lack of commercialization**. Policy **uncertainty with regard to climate change action also increases the risk of investing in green technology**. 38 For example, **in a 2011 survey of businesses, most respondents cited ambiguity in government support as the key risk associated with low-carbon**



investments. 39 As a result, renewable energy tax credits that need to be annually approved increase the risk of investing in renewable energy projects. 40 Government action to stimulate innovation in green technologies is also required to address the path dependency created by technology lock-in—the dominance of a market by an inferior technology. 41 Technological lock-in leads investors to continue investing in improving the efficiency of the incumbent technology, particularly where returns remain large and information on the new technology and its operation are limited. 42 The risk of technology lock-in is especially large in the energy market where the costs of shifting away from coal fired power stations with low operating costs creates incentives for owners to update or incrementally adjust their operations rather than moving to zero-carbon alternatives such as renewable energy. 43 This underinvestment in green energy is seen in the private sector's limited spending on energy R&D, which in 2007 was 0.23% of revenues, compared to the industry average of 2.6%. 44 37

## Carbon tax solves economy

### **Carbon tax is far better than cap and trade—proves government intervention is key to environmental regulations**

**Meltzer 14**--Fellow in Global Economy and Development, Brookings Institution, and adjunct professor at the Johns Hopkins School for Advanced International Studies. This article follows in part upon the author's earlier article. Joshua Meltzer, [Joshua, "A CARBON TAX AS A DRIVER OF GREEN TECHNOLOGY INNOVATION AND THE IMPLICATIONS FOR INTERNATIONAL TRADE", ALLIANCE21, <http://www.alliance21.org.au/about/people/joshua-meltzer>, Apr. 12, 2014, accessed 7/18/14]RMT

**There are also good policy reasons for preferring a carbon tax over a cap and trade system.**<sup>51</sup> One reason is the tendency to allocate free allowances under cap and trade bills to affected industries, which happened when the European Union passed its cap and trade system and was also the case under the U.S. House-passed cap and trade bill in 2009.<sup>52</sup> **Free allocations lead to windfall gains for those receiving them as firms sell excess allowances when abatement costs are lower than the allowance price.**<sup>53</sup> **Compared to a carbon tax, this reduces the amount of revenues raised that are available to achieve other goals, such as reducing the budget deficit and increasing the efficiency of the tax system.**<sup>54</sup> **More conceptually but no less important, the problem with a cap and trade system is that given the uncertainty with climate change science and the economic costs of reducing greenhouse gas (GHG) emissions, it gets wrong the balance between achieving environmental goals and minimizing economic costs.**<sup>55</sup> By setting fixed quantity targets for reducing GHG emissions, **a cap and trade system fails to reflect the uncertainty of climate science as to what reductions in GHG reductions are necessary while not effectively addressing uncertainty as to the economic costs of reducing GHG emissions**—which could be small or large, depending ultimately on unknown factors such as the rate of economic growth and the speed and cost of developing new clean energy technologies, **such as for renewable energy and carbon capture and storage (CCS).**<sup>56</sup> In contrast, **a carbon tax fixes the economic cost which can be changed if the original tax rate does not lead to the right level of CO<sub>2</sub> mitigation.**<sup>57</sup> **Another challenge with carbon pricing is its regressive nature as the burden falls more heavily on poorer households—though this is true for a tax and a cap and trade system.**<sup>58</sup> **One way of dealing with this is by offsetting other taxes with revenues raised.**<sup>59</sup> For instance, **Gilbert Metcalf has proposed using the revenues raised to cut the income tax tied to payroll taxes paid by workers.**<sup>60</sup> **A carbon tax is most efficient when set at a rate that equates the marginal cost of reducing CO<sub>2</sub> to the marginal social cost of the CO<sub>2</sub> to society.**<sup>61</sup> **A carbon tax will internalize the environmental costs of CO<sub>2</sub> emissions and send a price signal that should lead to reduced consumption of energy intensive goods.**<sup>62</sup> **Such a carbon tax should also produce the largest welfare gains.**<sup>63</sup> **This paper does not address how to design an optimal carbon tax, but in general, a carbon tax should be levied on upstream activities, which minimizes the number of sources with compliance obligations and thereby reduces its administrative costs.**<sup>64</sup> Yet, **the incidence of a carbon tax will be mostly on downstream consumers as the tax is shifted forward in the form of higher energy and fuel prices.**<sup>65</sup> **A carbon tax is also an important incentive for companies to innovate and develop new green technologies that reduce their CO<sub>2</sub> emissions and their costs of complying with the tax.**<sup>66</sup> **A survey of OECD countries using environmental taxes demonstrates a positive effect on innovation.**<sup>67</sup> **Carbon taxes therefore provide a double dividend—internalizing the cost of the environmental harm from CO<sub>2</sub> emissions and**

**producing green technologies through induced innovation.**<sup>68</sup> However, **a carbon tax alone is unlikely to lead to an optimal level of innovation in green technologies.** One reason is that **the cost to firms of a carbon tax can dominate any return from the development of green technologies.**<sup>69</sup> There is also evidence that a carbon price is an effective incentive for incremental innovation but on its own is unlikely to produce the transformative innovation in green technologies that are required to significantly reduce CO2 emissions.<sup>70</sup> **There are also the types of barriers and market failures outlined above to developing new technologies that a carbon tax would not address.** For instance, **the gap between the social and private gains from R&D and knowledge uncertainties would not be overcome with a carbon tax.**<sup>71</sup> Moreover, **to overcome technological lock-in would require such a high carbon tax—**particularly when it comes to overcoming the dominance of fossil fuels in the energy sector—that it would likely be politically unfeasible.

### **Green tech incentives can create global solutions to climate change.**

**Meltzer 14**—Fellow in Global Economy and Development, Brookings Institution, and adjunct professor at the Johns Hopkins School for Advanced International Studies. This article follows in part upon the author's earlier article. Joshua Meltzer, [Joshua, "A CARBON TAX AS A DRIVER OF GREEN TECHNOLOGY INNOVATION AND THE IMPLICATIONS FOR INTERNATIONAL TRADE", ALLIANCE21, <http://www.alliance21.org.au/about/people/joshua-meltzer>, Apr. 12, 2014, accessed 7/18/14]RMT

The **adoption** by the United States **of a carbon tax will create an incentive for both U.S. and overseas firms to innovate and develop green technologies.** As outlined above, **a carbon tax can induce innovation by incentivizing U.S. firms to innovate and produce green technologies that reduce the impact of the tax.** Not all firms will be innovators, and many will instead turn to the market to obtain the latest green technologies to reduce their CO2 emissions. **This demand for green technologies by the world's largest economy will also create a strong global incentive for the development of new green technologies in other countries.** Increased **global innovation in green technologies will also have a range of positive spillovers.** As new **sources of R&D and opportunities for scientific collaboration open up, greater resources become available to fund the innovation process and the knowledge and skills to assess the commercial viability of green technologies increases the access to and reduces the costs of finance. These factors should drive down the costs of innovation and development of green technologies. A carbon tax will also incentivize the development of green technologies that can be used to reduce CO2 emissions in the country applying the tax as well as overseas.** This is because a **carbon tax, unlike a technology standard, creates an incentive to find multiple ways of reducing CO2 emissions. As a result, a carbon tax should lead to a broader range of innovations that could also be applicable in other countries.**<sup>101</sup> The increase in innovation that would follow the **introduction by the United States of a carbon tax should lead to new opportunities for international collaboration and cooperation.** In some areas, **the United States has already forged these ties, such as with the U.S.-China Clean Energy Research Center, and has clean energy partnerships with Australia, Japan, and India, to name a few countries in the Asia-Pacific region.**<sup>102</sup> **Asia-Pacific Economic Cooperation (APEC) is also working on energy issues, including promoting the development of energy efficiency technologies.**

## **Tech development helps economy – jobs**

**Technological advancements draw a parallel to the space race decades ago. Efforts for global warming will provide many more jobs.**

(Low-carbon Innovation: A Uniquely American Strategy for Industrial Renewal; Bracken Hendricks, Sean Pool, and Lisbeth Kaufman, May 31 2011; Bracken Hendricks is a Senior Fellow at American Progress and works at the interface of global warming solutions and economic development. He is a longtime leader in promoting policies that create green jobs, sustainable infrastructure, and investment in cities. <http://www.americanprogress.org/issues/green/report/2011/05/31/9700/low-carbon-innovation/>)

As President Barack Obama put it in his 2011 State of the Union address, **“this is our generation’s Sputnik moment.”** Faced with high unemployment, increasing global competition, and mounting climate-related risks, **the United States has an immediate opportunity to forge progressive economic growth strategies that turn the threats posed by climate change and our rivals’ increased manufacturing and innovation prowess into opportunities.** Decades ago the challenge of the space race launched an earlier generation of public-private partnerships, advanced research and development, and increased domestic manufacturing. Likewise, today, **well-crafted policies that reinvest in American jobs in response to the rising threat of climate change can help restore our industrial leadership.** These policies should take shape through a cohesive set of federal, state, and local low-carbon economic growth strategies. **A strong low-carbon economic growth strategy should focus on developing,** producing, and commercializing low-carbon technologies in order to accelerate near-term job creation and economic growth, promote innovation-led economic competitiveness and export expansion, and increase energy and economic security while reducing climate vulnerability.

## **Environmental regulations increase productivity**

### **Regulations increase productivity**

**Lanoie et al 11** – professor at HEC Montreal, in economics from Queen's University [Paul, "Environmental Policy, Innovation and Performance: New Insights on the Porter Hypothesis", Journal of Economics & Management Strategy, Volume 20, Number 3, Fall 2011, accessed 7/18/14] JW

The second set of studies, which focuses on the effects of regulation on productivity, has a long tradition in the economic literature (see Jaffe et al., 1995, for a review). Most papers reviewed in Jaffe et al. (1995) highlight a negative impact of environmental regulation on productivity. For instance, Gallop and Robert (1983) estimated that SO<sub>2</sub> regulations slowed down productivity growth in the United States in the 1970s by 43%. More recent papers find positive results more in line with the "strong" version. For example, Berman and Bui (2001) report that refineries located in the Los Angeles area enjoyed a significantly higher productivity than other U.S. refineries, despite a more stringent air pollution regulation in this area. Similarly, Alpay et al. (2002) estimated the productivity of the Mexican food processing industry to be increasing with the severity of environmental regulation. They therefore suggest that more stringent regulation is not always detrimental to productivity.

### **Regulations positively impact renewable tech – benefits companies**

**Lanoie et al 11** – professor at HEC Montreal, Ph.D. in economics from Queen's University [Paul, "Environmental Policy, Innovation and Performance: New Insights on the Porter Hypothesis", Journal of Economics & Management Strategy, Volume 20, Number 3, Fall 2011, accessed 7/18/14] JW

In the first set of papers, Jaffe and Palmer (1997) estimate the relationship between pollution abatement costs (a proxy for the stringency of environmental regulation) and total R&D expenditures, as well as the number of successful patent applications in U.S. manufacturing. They found a positive link with R&D expenditures (an increase of 0.15% in R&D expenditures for a pollution abatement cost increase of 1%), but no statistically significant link with the number of patents. Also drawing upon U.S. data, but restricting themselves to environmentally related patents granted, Brunnermeier and Cohen (2003) found a positive but small relationship with environmental regulation. Both studies suggest a weak but positive link between a more stringent environmental policy regimes and the firm's innovation policy. Popp (2006) provides evidence that the introduction of environmental regulation on sulphur dioxide (SO<sub>2</sub>) in the United States, and on nitrogen dioxides in Germany and Japan, was shortly followed by a very significant increase in the number of relevant patents. In a panel study of OECD countries, Johnstone et al. (2010) found that the introduction of different policies (e.g., feed-in tariffs, renewable energy credits) has a positive impact on patenting of renewable energy technologies.

## Offshore Oil and LNG – jobs

### **Ocean Energy Key to Jobs and Economy**

**Guardian 14** (Guardian Media, July 19, 2014, “US opens East Coast to oil search”

<http://www.guardian.co.uk/business/2014-07-19/us-opens-east-coast-oil-search> , Access 7-19, AW)

**The bureau estimates that 4.72 billion barrels of recoverable oil and 37.51 trillion cubic feet of recoverable natural gas lies beneath federal waters from Florida to Maine. Oil lobbyists say opening it to drilling could generate \$195 billion in investment and spending between 2017 and 2035, creating thousands of jobs and contributing \$23.5 billion per year to the economy.**

### **Lifting restrictions on energy development creates jobs**

**VanRyan 2010** (Jane VanRyan, Feb 16, 2010, “Energy Development: The Key to Jobs”

<http://www.miller-energy.com/2010/02/energy-development-the-key-to-jobs/> , Access 7-19, AW)

As we’ve been saying here for the past several weeks, **the oil and natural gas industry could help to pull the economy out of the doldrums if it were allowed to search for and produce more domestic energy. The United States has abundant energy resources, and developing them could create hundreds of thousands of well-paying jobs, send much needed revenues to federal, state and local governments to pay for services, and improve U.S. energy security.** Two newly released studies back up these statements. • One study issued yesterday says that **restrictions on oil and natural gas drilling could cost the U.S. economy \$2.36 trillion through 2029, raise energy prices, and result in the payment of \$607 billion to OPEC countries.** The study was conducted by SAIC Corp. and commissioned by the National Association of Regulatory Utility Commissioners (NARUC) and the oil and natural gas industry. **“Unless...policies change, Americans can look forward to a world with millions of fewer jobs, higher gas prices, higher electricity prices, and billions of America dollars being sent to hostile foreign countries,”** Rep. Doc Hastings (R-Wash.) said, according to Dow Jones. • A separate study says **the jobs of nearly 600,000 Canadians were supported by the natural gas industry in 2008.** The study, conducted by IHS Global Insight for America’s Natural Gas Alliance (ANGA) also shows that **the natural gas industry contributed more than \$106 billion to Canada’s Gross Domestic Product (GDP).** **“As we make decisions about job creation, energy production and our transportation future, it’s crucial we keep in mind just how central natural gas is to Canada’s economy and Canadian families’ lives,”** Eric March, executive VP, Natural Gas Economy of EnCana, told Canada NewsWire. **In the United States, the oil and natural gas industry supports about 9.2 million jobs and stands ready to create even more economic opportunity. No stimulus plan, handout or earmark would be required. The industry simply needs the government’s permission to drill.**

### **Oil and natural gas development creates economic growth- jobs**

**Bradley 12** (Robert Bradley Jr., 05 July 2012, “Energy Development Could Hold the Key for America’s

Unemployed Masses” <http://oilprice.com/Energy/Energy-General/Energy-Development-Could-Hold-the-Key-for-Americas-Unemployed-Masses.html> , Access 7-19, AW)

“For many American families, struggling to make ends meet in the jobless recovery, **energy development is an answer to a prayer. The fact that the oil and gas boom has been done without taxpayer subsidies—and despite reactionary public policies at the federal level and in some states (such as New York)—means that more economic opportunity is on tap.**” In this so-called “jobless” recovery, aka the Great Recession, an estimated 20 million American workers are unemployed or underemployed. One out of every two college students cannot find work in their chosen fields. Competition for well-paying jobs is likely to become even tougher when thousands of men and women in uniform return home from Afghanistan and look for ways to support their families. **Although many U.S. industries have been reluctant to hire new**

**workers due to political and economic uncertainty, the oil and natural gas industry is booming worldwide. Jobs are available on offshore rigs, at service companies that support energy production activities, and onshore where technologies are unlocking energy supplies from impermeable rock deep underground. Hydraulic fracturing, directional drilling, and 3- and 4-D computer modelling, among other high technologies, are helping to produce oil and natural gas from shale formations** that once were believed to be too difficult or too expensive to tap. **In the process, they are creating jobs at large and small companies in dozens of states. In the bigger scheme of things, this renaissance means that the hydrocarbon energy era has an open-ended future.**In North Dakota, where drillers are producing crude oil from the Bakken Shale, **workers are finding jobs offering wages that are significantly higher than the national average.** Truck drivers are being paid \$80,000 a year to start. **Some workers on oil rigs are being paid six figures.** And yet many jobs are going begging. According to the mayor of Williston, **"A lot of jobs get filled every day, but it's like for every job you fill, another job and a half opens up."** In April, **North Dakota had a jobless rate of 3.0 percent, the lowest in the country.**In Pennsylvania's Marcellus Shale region, tens of thousands of jobs have been created, opening opportunities for unskilled labourers to obtain training and earn excellent wages. According to the state's Department of Labour and Industry (Center for Workforce Information and Analysis), jobs for drill operators are expected to grow by nearly 85 percent this year, while the job growth rate otherwise in Pennsylvania is projected to be less than three percent.

## New ocean development helps economy – offshore energy

### **OCS Drilling contributes trillions of dollars to economic growth and creates millions of jobs**

**Mason 9** (Joseph, Hermann Moyse Jr./Louisiana Bankers Association Endowed Chair of Banking, Louisiana State University, E. J. Ourso College of Business, February 2009, American Energy Alliance, “The Economic Contribution of Increased Offshore Oil Exploration and Production to Regional and National Economies,” [http://www.americanenergyalliance.org/docs/images/aea\\_offshore\\_updated\\_final.pdf](http://www.americanenergyalliance.org/docs/images/aea_offshore_updated_final.pdf), ND)

Over the life span of development, OCS planning areas will contribute approximately \$8.7 trillion dollars to U.S. economic growth, of which some \$2.2 trillion can be expected to be paid out in wages to employees in almost 38 million annual jobs, many in high-paying professional career fields. That economic growth will also generate more than \$1.6 trillion in Federal tax revenues, almost \$0.6 trillion in state and local tax revenue, and \$0.4 trillion in royalty revenue that will be split between federal and state governments. Those revenues will contribute to schools, health centers, and infrastructure projects that will contribute substantially to the quality of life in not only coastal regions directly affected by the development, but nationwide. Immediate revenues from exploration can also help many coastal states weather the effects of the present recession and mortgage crisis without Federal aid. While some are suggesting limiting OCS Planning Area development to areas located more than one hundred miles offshore, it is important to point out that such limitations substantially curtail the benefits of OCS development. Not only are the costs of such deep and ultradeep water development often prohibitive, but production in such areas is more volatile as a result and Federal subsidies substantially diminish the potential public revenue gains from opening OCS Planning Areas. In summary, investment and development in OCS Planning Areas can increase economic growth with attendant effects on jobs, wages, taxes, and other public revenues, helping to both invigorate and stabilize economic growth while reducing oil price volatility. The resulting economic growth and public revenues are particularly attractive to local economies close to previously prohibited OCS planning areas like those off the coasts of California and Florida, which are experiencing the full force of recession and mortgage foreclosures. Jobs in these areas can be particularly powerful in resuscitating the economy and restoring economic growth. It makes no sense to consciously choose to forego such a substantial source of economic growth in a recession. In closing, a caveat. The present analysis is only meant to be a starting point for discussing the economic effects of unavailable OCS resources rather than an exact estimate of the economic effects of OCS Planning Area development and operation. Clearly there will be debate about many of the parameters used in the analysis. No amount of debate, however, should detract from the simple reality that reaffirming the OCS moratoria will leave valuable economic growth opportunities on the table precisely at a time when the country owes its citizens access to jobs and wages that can help them weather the current recession.

### **New sustainable ocean research spark private sector growth and makes it economically competitive.**

**Maretich 2011** (Marta, Maximpact’s Chief Writer, 2/5/14, Triple Pundit, “Boosting Impact Investment in Natural Resources: Oceans,” <http://www.triplepundit.com/2014/02/global-sustainability-agenda-will-boost-impact-investment-natural-resources-part-oceans/>, ND)[“America’s Ocean Future Ensuring Healthy Oceans to Support a Vibrant Economy” JOCI pg 6, June 2011]

Our oceans, coasts, and Great Lakes hold significant untapped potential for new and emerging ventures. Development of offshore renewable energy from wave, wind, tidal, and geothermal sources is a promising area that is expected to see significant growth in the future. Emerging fields such as offshore



aquaculture, marine-based research and drug discovery, short sea shipping, and deep seabed mining hold the promise of new jobs and sources of revenue. These fields will impact entire supply chains, including technology developers, engineers, manufacturers, installers, managers, and consumers of energy, seafood, and other goods. Arctic exploration and newly accessible shipping lanes due to melting sea ice will result in new scientific discoveries, faster trade routes, and access to previously unavailable natural resources.

## **Ocean energy development – jobs**

### **Ocean energy development sparks economic growth and jobs – EU proves**

**URQUHART 14**(FRANK URQUHART, 19th July 2014, “EC ocean energy plan ‘could create 20,000 UK jobs’” <http://www.scotsman.com/news/environment/ec-ocean-energy-plan-could-create-20-000-uk-jobs-1-3275088> , Access 9-19, AW)

**THE European Commission has unveiled a new action plan for the fledgling renewable ocean energy sector in Europe, which could create up to 20,000 jobs in the UK in the next two decades.**The drive to harness Europe’s “blue energy” potential is to be led by the establishment of an Ocean Energy Forum, and Scotland’s Energy Minister, Fergus Ewing, today claimed that Scotland would have a major role to play in the Commission’s renewable energy initiative.**A European Commission spokesman said: “Ocean energy has the potential to create new, high-quality jobs. Indicative job estimates show that 10,500 - 26,500 permanent jobs, and up to 14,000 temporary jobs, could be created by 2035. Other estimates suggest that it could lead to the creation of up to 20,000 jobs by 2035 in UK alone and 18,000 in France by 2026.”**The proposals were outlined by Maria Damanaki, the European Fisheries Commissioner, and Günther Oettinger, the European Energy Commissioner, to help drive forward the nascent “blue energy” sector towards full industrialisation.

## **Shift to renewable energy help economic growth**

### **Green tech is better than fossil fuels, greater energy return on investment, fosters economic sustainability**

**Lanoie et al 11** – professor at HEC Montreal, Ph.D. in economics from Queen's University [Paul, "Environmental Policy, Innovation and Performance: New Insights on the Porter Hypothesis", Journal of Economics & Management Strategy, Volume 20, Number 3, Fall 2011, accessed 7/18/14] JW

**Declining EROI would threaten not just growth but also the level of output of the economy and, therefore, sustainability. Murphy and Hall (2010) document EROI for many energy sources, arguing that it is declining over time. Wind and direct solar energy have more favorable EROIs than biomass fuels but worse than most fossil fuels. However, unlike fossil fuels, the EROI of these energy sources tends to improve over time with innovation (Kubiszewski et al., 2010).** But current usage is very small and Murphy and Hall argue that there is no prospect of them replacing a large part of fossil fuel usage in the near future.

### **Green technology has the potential to boost the economy**

**Holliday 12** (Holliday, Stuart W. "Green Technology: The Key to More Jobs, Higher Exports, Cleaner Environment, Better Reputation?" *The Huffington Post*. TheHuffingtonPost.com, 24 Jan. 2012. Web. 17 July 2014. <[http://www.huffingtonpost.com/stuart-w-holliday/green-technology\\_b\\_1224096.html](http://www.huffingtonpost.com/stuart-w-holliday/green-technology_b_1224096.html)>. Stuart W. Holliday is the President and CEO of the Meridian International Center, nonprofit organization that works with the U.S. Department of State, U.S. embassies, governments, public and private sector organizations, and leaders worldwide to promote global diplomacy, leadership development, educational, cultural exchanges, and diplomatic policy programs. Holliday is the former U.S. Ambassador for Special Political Affairs at the United Nations and Special Assistant to President George W. Bush, as well as Associate Director of Presidential Personnel. Eric/Fred/John).

The Science of Necessity¶ We all agree that America needs to create more jobs, although there is certainly less agreement on how to do so. A few years ago, green technology was the solution to our problems, but energy prices sagged, investment dried up, and our patience for innovation waned. Though it seems the polish of green technology has dulled, let us not forget that the factors driving the rush have not disappeared, and will reemerge sooner than we think.¶ Instead of waiting for the next energy crisis to strike, let us use the current economic situation as the catalyst for renewed investment. While the days of a quick fix through quotas and 100 MPG retrofitted Priuses are largely behind us, a number of reasoned engineers, businesspeople, and government leaders have quietly moved forward using the spirit of the boom and the lessons of the bust to their advantage.¶ At a recent seminar convened by Meridian International Center, an interesting discussion took place among members of the diplomatic, public, and private sectors on this subject. All agreed that investing in green technologies is "common sense" -- but the reasons went well beyond environmental concerns. Research has shown that returns on investment in green tech are nearly certain to include large-scale job creation, increased American exports, add a desperately needed growth sector of the economy, and provide substantial long-term (and often short term) cost savings for companies of all size. Reinvestment anyone?¶ Yet the group also acknowledged the important diplomatic function that green technology plays. Our discussion included representatives from the United States, Finland, Georgia, and Nigeria -- all of whom noted that environmental collaboration must represent part of its overall diplomatic strategy. The realization that we have a common responsibility to protect the world we all share is the first step in tackling larger issues. Borders are man-made -- and the effects of environmental damage and over use rarely have the decency to stop at check-points. Working together to tackle the manageable issues of energy consumption is crucial, and the US has both the opportunity and obligation to take a leadership position in the world.¶ Diplomatic Buildings as Tools for Diplomacy¶ Just off of Massachusetts Avenue in Washington, D.C, the Finnish Embassy stands out in a city that defaults to traditional. With its clean lines, innovative building materials, and extensive integration of living greenery into the climate control ecosystem, it is unlike any other diplomatic building in the capital. The building is the first embassy in the United States to receive the EPA's Energy Star for superior energy efficiency, as well as the first to be awarded the U.S. Green Building Council's LEED certification. Listening to Ambassador Ritva Kouku-Ronde speak about it, one quickly notices the pride and passion that went into setting this example.¶ Most people probably don't know the US has been taking similar steps in their Embassies in recent years. For decades, the US Department of State has employed public diplomacy programs as a tool of relationship building -- through American Centers abroad, English language and other educational opportunities, cultural showcases, and

opportunities like Fulbright and International Visitor Leadership Programs. Increasingly, the Department has recognized the value of public diplomacy as a showcase for American innovation and technology as well -- using it as a tool for trade and economic growth.<sup>¶</sup> U.S. Entrepreneurship Leading in the Green Tech Field<sup>¶</sup> An example of this is seen through the eyes of a small business called Multistack, an American company pioneering a new generation of climate control systems. At our seminar, Multistack joined representatives from the U.S. Department of State to discuss how government architects worked with company engineers to incorporate innovative technology into the design of new and retrofitted Embassies.<sup>¶</sup> Throughout the world, you can now see dozens of examples of American technology combating the single greatest use of energy worldwide -- interior climate control. While there's rarely a shortage of energy in our country, many countries are not as fortunate -- and by setting an example in this simple issue, we not only showcase our technology, we reduce demand on burdened electricity systems at home and at US properties globally, and create jobs domestically. A virtuous cycle is set in motion when other countries follow our lead.<sup>¶</sup> While politicians wrangle with government's role in business, Multistack's experience is one example of a public-private collaboration that works. After years wondering where our economy is going, it's nice know we can work together to move smartly in the right direction. And for those of us who go about our life rarely thinking about energy efficiency -- usually only when watching the gas pump tick ever-higher, or paying our electric bill in the summer -- we are missing a tremendous amount of innovation and development in a sector that we are wise to invest in and seek to lead. It is time to start building on some united successes with the smartest people in industry and governments around the world. And that is energy well spent.

## Green energy helps economy

### **Switching to green energy would be cost-effective—benefits outweigh the costs**

The Guardian, 2014 (Damian Carrington, staff writer, “IPCC climate change report: averting catastrophe is eminently affordable,” April 13, <http://www.theguardian.com/environment/2014/apr/13/averting-climate-change-catastrophe-is-affordable-says-ipcc-report-un>, accessed 5.31.14 RG)

**Catastrophic climate change can be averted without sacrificing living standards according to a UN report, which concludes that the transformation required to a world of clean energy is eminently affordable. “It doesn’t cost the world to save the planet,” said economist Professor Ottmar Edenhofer, who led the Intergovernmental Panel on Climate Change (IPCC) team. The cheapest and least risky route to dealing with global warming is to abandon all dirty fossil fuels in coming decades, the report found. Gas – including that from the global fracking boom – could be important during the transition, Edenhofer said, but only if it replaced coal burning. The authoritative report, produced by 1,250 international experts and approved by 194 governments, dismisses fears that slashing carbon emissions would wreck the world economy. It is the final part of a trilogy that has already shown that climate change is “unequivocally” caused by humans and that, unchecked, it poses a grave threat to people and could lead to wars and mass migration. Diverting hundred of billions of dollars from fossil fuels into renewable energy and cutting energy waste would shave just 0.06% off expected annual economic growth rates of 1.3%-3%, the IPCC report concluded. “The report is clear: the more you wait, the more it will cost [and] the more difficult it will become,” said EU commissioner Connie Hedegaard. The US secretary of state, John Kerry, said: “This report is a wake-up call about global economic opportunity we can seize today as we lead on climate change.” The UK’s energy and climate secretary, Ed Davey, said: “The [report shows] the tools we need to tackle climate change are available, but international efforts need to significantly increase.” The IPCC economic analysis did not include the benefits of cutting greenhouse gas emissions, which could outweigh the costs. The benefits include reducing air pollution, which plagues China and recently hit the UK, and improved energy security, which is currently at risk in eastern Europe due to the actions of Russia – a large producer of gas – in Ukraine. The new IPCC report warns that carbon emissions have soared in the last decade and are now growing at almost double the previous rate. But its comprehensive analysis found rapid action can still limit global warming to 2C, the internationally agreed safe limit, if low-carbon energy triples or quadruples by 2050. “It is actually affordable to do it and people are not going to have to sacrifice their aspirations about improved standards of living,” said Professor Jim Skea, an energy expert at Imperial College London and co-chair of the IPCC report team. “It is not a hair shirt change of lifestyle at all that is being envisaged and there is space for poorer countries to develop too,” Skea told the Guardian. Nonetheless, to avoid the worst impacts of climate change at the lowest cost, the report envisages an energy revolution ending centuries of dominance by fossil fuels – which will require significant political and commercial change. On Thursday, Archbishop Desmond Tutu called for an anti-apartheid style campaign against fossil fuel companies, which he blames for the “injustice” of climate change. Friends of the Earth’s executive director, Andy Atkins, said: “Rich nations must take the lead by rapidly weaning themselves off coal, gas and oil and funding low-carbon growth in poorer countries.” Along with measures that cut energy waste, renewable energy – such as wind, hydropower and solar – is viewed most favourably by the report as a result of its falling costs and large-scale deployment in recent years. The report includes nuclear power as a mature low-carbon option, but cautions that it has declined globally since 1993 and faces safety, financial and waste-management concerns. Carbon**

**capture and storage (CCS) – trapping the CO2 from coal or gas burning and then burying it – is also included, but the report notes it is an untested technology on a large scale and may be expensive. Biofuels, used in cars or power stations, could play a “critical role” in cutting emissions,** the IPCC found, but it said the negative effects of some biofuels on food prices and wildlife remained unresolved. **The report found that current emission-cutting pledges by the world’s nations make it more likely than not that the 2C limit will be broken and it warns that delaying action any further will increase the costs.**

## New ocean development helps economy – general

**Ocean development helps the economy – hundreds& exploration holds significant potential for econ**

**Joint Ocean Commission Initiative (JOCI, organization that works with all sectors of thousands of jobsthe ocean community to encourage action and monitor progress toward meaningful ocean policy reform) ‘11**

**Ventimiglia 7/1** (Nicole, 7/1/14, “NOAA Reports 2011 Ocean, Great Lakes Economy Data” Marine Link, <http://www.marinelink.com/news/reports-economy-ocean372197.aspx>, ND)

**In 2011, the U.S. Ocean and Great Lakes economy produced \$282 billion in goods and services and employed 2.2 percent of the nation’s workers**—that’s more than twice the percentage of workers in the U.S. agriculture industry. This fact and many others are featured in a 2011 data summary from Economics: National Ocean Watch (ENOW), a product of the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center. **ENOW’s annual time-series data highlight six economic sectors and cover roughly 400 coastal counties, 30 coastal states, eight regions, and the nation**, using data derived from the federal Bureau of Labor Statistics and Bureau of Economic Analysis. Although the data collection lags a bit (2011 vs. 2014), **the success story of the 2011 ocean and Great Lakes economy has hundreds of important chapters**, and here are just a few: From 2010 to 2011, **the ocean and Great Lakes economy gained 67,000 jobs—an increase in employment of 2.4 percent, which was twice the job-growth rate as in the U.S. economy as a whole**. Alabama, Delaware, New Hampshire, and Texas experienced the highest rates of employment growth. **The tourism and recreation sector accounted for 70 percent of employees** but averaged the lowest wages of the six sectors represented. **Self-employed workers held half the jobs in the living resources sector**. ENOW data and tools have been used in many other ways—for instance, to develop baseline economic profiles for 70 East Coast communities and to plan for coastal hazards in Florida. **The ocean and Great Lakes economy falls into the six broad sectors shown below**. **In 2011, two sectors accounted for a large piece of the economic pie: the tourism and recreation sector accounted for 70 percent of employment while offshore mineral extraction contributed 37 percent to the total gross domestic product (GDP) of the ocean and Great Lakes economy**. From 2010 to 2011, real GDP grew by 2.7 percent, faster than the U.S. economy as a whole (1.6 percent). **Offshore mineral extraction employment grew the fastest of all sectors, with an increase of 6.2 percent. However, ship and boat building grew the fastest in terms of real GDP, with an increase of 19.7 percent**. Indeed, four of the ocean economy’s six sectors paid wages that were higher than the national average. The two exceptions—tourism and recreation and living resources—are characterized by seasonal and part-time employment. The tourism and recreation sector paid the lowest average wages but provided many part-time and entry-level jobs for young workers and students. In 2011, California, Texas, Florida, and New York accounted for about half the total employment and half the total GDP in the U.S. Ocean and Great Lakes economy. New Hampshire, Delaware, Alabama, and Texas had the highest rates of growth in employment. The data regarding states with the highest employment in each of the ocean sectors is telling: **Offshore mineral extraction and marine construction activities are highly concentrated in the Gulf of Mexico, with Texas and Louisiana accounting for three-fourths of the nation’s employment in this ocean sector**. **The ocean and Great Lakes economy accounts for an additional 132,000 self-employed workers, and these workers received total receipts of \$8.0 billion in 2011**. **In the living resources sector, about 120,000 workers accounted for all the seafood produced in the U.S.** Half of these workers (and most fishermen) were self-employed workers. **Employment in the living resources sector is concentrated in activities associated with processing and marketing seafood. And, at the end of the day, this means workboats and brown water activities**.

## New ocean exploration improves economy – general

**Ocean exploration key to finding new resources – that boosts economy, solves environmental/health problems, and solves food insecurity.**

**Alexander 11** (Constantine, former Managing Director for H.J. Meyers investment banks in California, USA; a consultant to the Commission of the European Union in Brussels, Belgium; and project coordinator of the EU LIFE-Nature Project on Tilos, Greece, mbassador of the EU Natura 2000 Networking Program for exemplary environmental management of an EU Special Protection Area (SPA), October 2011, Global Oceans, “The Economic Value of Ocean Research,” <http://global-oceans.org/site/2011/10/the-economic-value-of-ocean-research/>, ND)

**The deep sea is teeming with life, most of which is yet undiscovered** or about which little is known. **And although the intrinsic value of the oceans to every living being can never be quantified, values can be ascribed to the goods and services provided by the marine environment** – but only to the extent that scientists have conferred upon us the benefit of knowledge about our marine world and all that it continues to offer. **While marine scientific research and conservation may be regarded by some as disassociated from economic pragmatism and the application of sound investment principles, global data analysis has revealed some surprising conclusions to the contrary.** Marine research has allowed us to evaluate and prioritize the remarkable benefits we derive from oceanic “suppliers” of which we have. **A 2008 study** supported by Conservation International and the US National Oceanic and Atmospheric Administration (NOAA) **reported the total net benefit per year provided by the world’s coral reefs alone at \$29.8 billion, including coral reef contribution to coastal protection valued at \$9 billion and fisheries valued at \$5.7 billion.** Marine research has also uncovered the value of sharks, once viewed as threats rather than resources. According to the Australian Institute for Marine Science, a single reef shark can contribute \$1.9 million in its lifetime to the economy of the Republic of Palau through the country’s shark diving industry that generates \$18 million annually. That represents 8% of Palau’s gross domestic product and contributes as much as 14% of the country’s business tax revenue. **Marine research has also revealed that sharks are particularly resistant to cancer, which has been attributed to the presence of squalamine, a molecule in the liver that is currently being researched to determine its application in the treatment of brain tumors.** Marine research has therefore led us to the realization that the severe shark population depletion is highly detrimental to a multitude of interests, including even commercial shellfish fisheries as the population rise of traditional shark prey – skates and rays – is resulting in the loss of more commercially-raised oysters, scallops and clams. **As marine research leads to our valuation of ecosystem components, products and services, we can prioritize financial decision-making, develop sustainable resource extraction policies and determine where ecosystem services can be provided at a lower cost than man-made alternatives** – including carbon storage, coastal erosion protection, food resources, water purification and flood control. **These issues are becoming increasingly critical as our world population approaches 7 billion people.** The Global Oceans Solution The procurement of such indispensable marine research data has long been hampered by the disproportionately high cost and frequent unavailability of highly fuel consumptive marine research vessels that are burdened with excess capacity and equipment. **This problem has reduced the number, scope, productivity, geographical reach and frequency of marine research projects, rendering many to be cost prohibitive.** The Global Oceans concept of streamlining a research project’s needs to include only the necessary project equipment on a vessel specially selected for its spatial capacity and suitability will reduce mission costs and increase the availability of affordable vessels for project deployment around the world. **Global Ocean’s business framework of providing much needed support for science teams with cost efficient vessel and container management, the fulfillment of equipment needs and emergency support in international port locations will together greatly facilitate the funding and deployment of more marine research missions** that can concentrate on international scientific explorations while leaving the logistics to experienced professionals with a network of international contacts to supply necessary assistance, especially in the event of contingencies which tend to arise as a rule rather than as an exception. To **the extent that such knowledge can be**



**obtained in a reliable, efficient and cost-effective manner,** including through the Global Oceans business framework, **the greater our rewards will be as we recapture marine research investment costs through the development of new pharmaceuticals, medical treatments and the sustainable extraction of natural resources, along with the benefits we derive from our use of natural coastal protection, water filtration, nutrient recycling, and sustainable food sources from the oceans' natural bounty.**

## Overfishing harms economy/policies help the economy – jobs

### **Fisheries are key to the economy – overfishing hurts the economy**

**SIDS 14** [UN INTERNATIONAL CONFERENCE ON SMALL ISLAND DEVELOPING STATES (SIDS) 2014, <http://www.sids2014.org/content/documents/275BEconcept.pdf>, accessed 7/17/14]RMT

Globally 350 million jobs are linked to marine fisheries, with 90% of fishers living in developing countries. The value of fish traded by developing countries is estimated at US\$ 25 billion making it their largest single trade item. Global catch rose from 4 million tonnes in 1900, through 16.7 million tonnes in 1950, 62 million tonnes in 1980 to 86.7 million tonnes in 2000 but has stagnated subsequently 20 . In 2009 marine capture production was 79 million tonnes. Overall catch risks decline with 75% of stocks fully exploited or depleted . Human activity has directly and markedly reduced ocean productivity; additional deficits may be due to climate change increasing ocean stratification and reducing nutrient mixing in the open seas. Global Ocean Observing System (GOOS) and LME assessments show significant warming trends from which model projections 2040-2060 forecast a steady decline in ocean productivity 22 . The implementation of integrated, ecosystem-based approaches based on the best available science in a precautionary context, plus the removal of fishery subsidies that drive overexploitation offer the prospect of restoring key stocks and increasing catches. It is estimated that 50 US\$ billion per annum is lost to overfishing and could be progressively recovered through stock restoration. The implementation of sound management measures brings the promise of increased sustainable catches, lower energy utilisation and costs; thereby securing livelihoods and enhancing food security. 21

## **Link Defense – regulations don't hurt the economy**

## **Regulations don't hurt the economy – alt causes**

### **Recessions stems from austerity not regulations**

**USA Today 7/24/13**

( <http://www.usatoday.com/story/opinion/2013/07/24/slow-economy-recovery-austerity-editorials-debates/2585163/> )

For the most part, this is a good time to be a corporation. Those based in the United States earned \$1.8 trillion last year — after taxes. That's a record both in dollars and as a percentage of the economy.

Yet, with President Obama trying to refocus attention on middle-class issues during a speech Wednesday, many of his critics seem more concerned about the plight of corporations than of workers.

**Republicans see the economy's painfully slow recovery from the Great Recession as the result of overregulation** — from ObamaCare, banking reform and more. **The argument makes for good sound bites during congressional debates and cable talk shows. But, given the record corporate profits and new highs on Wall Street, it does not ring true.**

**The actual reasons for the sluggish rebound are many. One key cause is that economies overseas are in even worse shape, which dampens U.S. exports. Another is the long-term trend of productivity gains, mainly through technology, that make it possible for companies to produce more with fewer workers.**

**But the biggest factor is the most obvious: austerity.**

Still spooked from the financial crisis and uncertain about the future, consumers are gun-shy. Households have paid down nearly \$1.5 trillion in debt. Companies, meanwhile, have been equally cautious with their money. Doubting that future demand would justify expansion, they have used their copious profits for just about anything — paying down debt, hiking dividends, buying back shares — other than hiring.

## Internal link debate

## **X key to the economy**

## Consumer spending key to economy

### **Consumer spending accounts for large percent of economic growth – empirics**

**Mitchell and Morath, 6/26/14** (Josh and Eric “U.S. Consumer Spending Rises on Higher Inflation” Dow Jones Business News, June 26, 2014, <http://www.nasdaq.com/article/us-consumer-spending-rises-on-higher-inflation-20140626-00383#ixzz37slBtKdh>)

The economy contracted at a 2.9% annual pace in the first three months of the year as cold weather and snowstorms disrupted businesses and kept consumers home. Inflation-adjusted consumer spending rose at a paltry 1% pace in January through March after climbing 3.3% in the fourth quarter of last year.

**Many signs point to a rebound in economic growth in the second quarter, with forecasters projecting growth of between 3% to 4%. But that relies largely on consumers keeping their wallets open.**

**Consumer spending represents about two-thirds of economic demand in the U.S. The Federal Reserve is looking for a pickup in household spending and incomes as it winds down a bond-buying program and considers raising short-term interest rates.** The Fed has been purchasing bonds and keeping rates low to stimulate spending, investment and hiring.

### **consumer spending low now – key to jumpstart economy**

**Dunn 6/27/14** (Dunn, Catherine. "Weak Consumer Spending Could Slow Economic Growth."

International Business Times. N.p., 27 June 2014. Web. 18 July 2014. <<http://www.ibtimes.com/weak-consumer-spending-could-slow-economic-growth-1613796>>. Catherine Dunn is writer and reporter for the international business times.Fred).

A pair of Commerce Department reports this week showed that consumer spending is recovering from a weak first quarter more slowly than economists expected, and some are worrying that slowdown in a sector accounting for 70 percent of the U.S. economy could foreshadow slower economic growth on the whole. ¶ “To a large extent, we can’t have fast growth unless there’s rapid growth in consumer spending,” said William Emmons, senior economic advisor at the Center for Household Financial Stability at the Federal Reserve Bank of St. Louis.¶ The Commerce Department reported on Thursday that consumer spending for May ticked up just 0.2 percent, disappointing those who had predicted an increase of twice that much. That followed the department's revised estimate earlier this week on first-quarter GDP: It shrank 2.9 percent, the worst showing since the first quarter of 2009. The drop reflected a new, smaller estimate of consumer spending for that period, revised downward from 3.1 percent growth, to 1 percent. ¶ Yet the latest figures underscore a still-sluggish return to economic life following the Great Recession. “We’re five years past the trough in the economy, and consumption is way behind the growth you would expect in a typical business cycle,” said Washington University economics professor Steven Fazzari.¶ Prior to the recession, the rate of consumer spending grew about 3 percent a year. By contrast, “We are tracking remarkably close to 2 percent year-over-year for the past three or four years,” Emmons said.¶ At that rate, “you wouldn’t expect the overall economy to be growing much faster,” Emmons added.¶ One brighter spot emerged on Friday when the Thomson Reuters/University of Michigan June consumer sentiment index rose to 82.5, up from 81.9 the previous month.¶ Survey director Richard Curtin suggested in a statement that the data show that “consumers believe the first-quarter decline in economic activity was due to the harsh winter weather, and that the economy has already returned to positive economic growth,” ¶ But both Fazzari and Emmons are less encouraged, and they pointed to tighter credit and decreased borrowing as likely explanations for why consumer spending has not bounced back. “Much of our consumption before the recession was being financed by higher debt,” Fazzari said. “With the financial crisis, that process came to an end.”

## **Manufacturing key to the economy**

**And strong manufacturing is necessary for sustained U.S.**

**recovery** **UPL 2012** (Peter Morici, "Manufacturing is key to U.S. economic recovery," April 13,

[http://www.upi.com/Top\\_News/Analysis/Outside-View/2012/04/13/Manufacturing-is-key-to-US-economic-recovery/UPI-90161334313000/](http://www.upi.com/Top_News/Analysis/Outside-View/2012/04/13/Manufacturing-is-key-to-US-economic-recovery/UPI-90161334313000/), last accessed 6.7.14 RG)

**Manufacturing has been the bright star of the recent economic recovery, recouping 470,000 of the 5.3 million jobs lost since 2000, but it could do a lot better. Yet, so many bogus arguments are offered as to why it shouldn't.** Improvements in productivity have certainly cut manufacturing employment in Europe, the United States and China but improvements in productivity occur in all sectors, every year -- those are the very essence of progress. Agriculture dramatically improved productivity in the 20th century but Americans didn't give up farming. If the United States redressed three-quarters of its \$650 billion deficit in manufacturing someone would have to make that stuff, even if at higher levels of efficiency than in the past. The U.S. economy would be 5 percent larger and policymakers would be worrying about a genuine shortage of workers. China's low wages are an advantage in labor-intensive activities but U.S. technology should be an advantage in others. That's how Germany remains a leader in factory jobs and exports with a wage structure that is higher than the United States -- unless the Germans are smarter than Americans, we should be able to do it, too. **America is a leader in service exports but despite concerted efforts to increase those through trade agreements over the last three decades, the U.S. export surplus in business services is about \$80 billion -- the United States isn't going to do much more than double that, even if it manages to crack the highly protected Chinese and other Asian markets through diplomacy and new trade pacts.** Modern domestic economies may be dominated by services but most of those services don't move in international commerce -- consider movie theaters, dry cleaners and plumbers. Whereas the international economy, like the U.S. trade deficit, is dominated by commodities and manufacturers. Wishful thinking by academics, pundits and Wall Street financiers won't change that. **Moreover, manufacturing contributes to the dynamics of growth in other ways. It pays higher wages and supports two-thirds of all research and development, which generates the intellectual property that supports America's higher standard of living. Without manufacturing, much of the innovation in services wouldn't happen.** For example, were Intel and IBM not U.S. companies, it is highly doubtful that Apple, Microsoft and business solutions software companies, which do a lion share of R&D in the services sector, would be American firms today. **America's principal rivals, the governments of China, Germany and Japan have long recognized these facts and managed their currencies, tax structures and business incentives to ensure competitive manufacturing sectors.**

**Manufacturing is key to the US economy – creates domestic jobs and increases international competitiveness**

**Rynn 11** (Jon, author of the book Manufacturing Green Prosperity: The power to rebuild the American middle class; Ph.D. in political science and is a Visiting Scholar at the CUNY Institute for Urban Systems, 5/23/11, Roosevelt Institute, "Six Reasons Manufacturing is Central to the Economy," <http://www.nextnewdeal.net/six-reasons-manufacturing-central-economy>, ND)

1. **Manufacturing has been** the path to development It has been **the strategic achievement of rich nations over the last several hundred years to create a high-quality manufacturing sector in order to develop national wealth and power**, as Erik Reinert shows in his book "How Rich Countries Got Rich...and Why Poor Countries Stay Poor."



**From the rise of England** in the 19th century, **to the rise of the US**, Germany, Japan and the USSR in the 20th, to the newly industrializing countries like Korea, Taiwan, and now China, **manufacturing has been the key to prosperity.** 2.

**Manufacturing is the foundation of global “Great Power”** The most powerful nations in the world — the “Great Powers” — **are those that control the bulk of the global production of manufacturing technology.**

**That is, it isn’t enough simply to have factories and produce more goods, you have to know how to make the machinery that makes the goods.** The key to power, then, is to make the “means of production.” **As the machinery industries go, so goes Great Power. My own research shows that about 80% of the world’s production of factory machinery has been controlled by what we would consider the “Great Powers.”** **Until the 1950s, the US had produced about 50%; we now produce less than China’s 16%.** 3. Manufacturing

is the most important cause of economic growth **The growth of manufacturing machinery output, and technological improvements in that machinery, are the main drivers of economic growth. No machinery industries, no sustained, long-term economic growth. Just** consider the explosion of the Internet, iPhones, and the like — all made possible by a small subset of production machinery called semiconductor-making equipment (SME), which itself is dependent on other forms of production machinery, such as the machine tools that grind the lenses they use or the alloys of metal the metal-making industries output.

**These technologies reproduce themselves, as when an SME makes the semiconductors that then go to make more SMEs, or when a machine tool makes the metal components that not only go into other pieces of machinery, such as cars, but are used to produce yet more machine tools.** The technological and productive potential of machine tools and SMEs affect each other as well, leading to the explosive economic growth of the last two hundred years. Sign up for weekly ND20 highlights, mind-blowing stats, and event alerts. 4. **Global trade is based on goods, not services**

**A country can’t trade services for most of its goods. According to the WTO, 80% of world trade among regions is merchandise trade — that is, only 20% of world trade is in services.** This closely matches the trade

percentages that even the US, allegedly becoming “post-industrial,” achieves. **If in the extreme case an economy was composed only of services, then it would be very poor, because it couldn’t trade for goods; its currency would be worth very little. The dollar is also vulnerable in the long-term.** A “post-industrial” economy

is really a pre-industrial economy — that is, poor. 5. **Services are dependent on manufactured goods** **Services are mostly the act of using manufactured goods. You can’t export the experience of using something.**

**Retail and wholesale, which make up about 11% of the economy, are the act of buying and selling manufactured goods.** The same goes for real estate, another 13%, which is the act of buying and selling a “real” or physical asset, a building. Even health, which makes up about 8% of the economy, is the act of using medical equipment and drugs (all figures from 2010, value-added). **Finance involves the redirection of surplus resources that the nonfinancial sector of the**

**economy produces, which means that indirectly, even finance is dependent on manufacturing.** The cycle of rise and decline usually runs like this: **some clever society figures out how to take advantage of the current technologies of production, thus generating huge surpluses, which either the financial forces, the very wealthy, or the military then appropriate for their own wealth and power; they kill the goose that is laying the golden eggs.** To sum up: **the health of the economy is critically dependent on the health of the**

**manufacturing sector.** 6. **Manufacturing creates jobs** Most jobs, directly or indirectly, depend on manufacturing — **and reviving the sector could provide tens of millions of new jobs, eradicating the Great Recession.** In 2005, the Japanese manufacturing sector was 20.2% of its economy, in Germany it was 23.2%, and in the US manufacturing accounted for 13.4%, according to the the OECD. **Using 2005 figures, if the US had the same percentage as Japan, we would have 7**

**million more high-quality, long-term, well paying jobs. If we were equal with Germany, we would have 10 million more. And according to the Economic Policy Institute, each manufacturing job supports almost three other jobs in the economy.** That makes sense, considering the other five reasons that manufacturing is central to the economy. Thus, there are six solid reasons that we need to rebuild the manufacturing sector of the United States. **It’s time for the United States to wake up before it’s too late and rebuild the foundation of a strong, prosperous, middle class economy.**

## Prosperity is directly tied with strong manufacturing – empirics prove

**Chang 11** (Ha-Joon, teaches at the Faculty of Economics, University of Cambridge. In addition to numerous articles in journals and edited volumes, he has written 13 books and edited 10, 6/28/11, The Economist, "Manufacturing," <http://www.economist.com/debate/days/view/714>, ND)

I propose that **the state of a nation's manufacturing base** (its size and competitiveness) **is the most important determinant of its prosperity**. Hearing this motion, **some may ask: how about countries like Switzerland and Singapore**, which have become rich through services, like finance, tourism and trading; don't they show the viability of service-based prosperity? **Actually, they show the exact opposite. According to UNIDO data, in 2002, Switzerland had the highest per head manufacturing value added (MVA) in the world**—24% more than that of Japan, the second highest. In 2005, it ranked second, after Japan. Singapore ranked third. **So these supposed "model" service-based economies are in fact two of the strongest manufacturing nations in the world. Of course, there are some countries, such as Australia, that maintain high living standards without a big manufacturing sector, thanks to exceptional natural resource endowments. But most other countries are not so lucky. Without a substantial and productive manufacturing base, it is impossible for them to attain high living standards.** There is truth in the argument that above a certain level of development, countries become "post-industrial", or "deindustrialised". But that is only in terms of employment—the falling proportion of the workforce engaged in manufacturing. **Even the richest economies have not really become post-industrial in terms of their production and consumption.** From expenditure data in current (rather than constant) prices, **it may appear that people in rich countries are consuming ever more services, but that is mainly because services are becoming ever more expensive in relative terms, thanks to structurally faster productivity growth in manufacturing.** By their very nature, many service activities are inherently impervious to productivity increases. In some cases, the very increase in productivity will destroy the product itself. If a string quartet trots through a 27-minute piece in nine minutes, would you say that its productivity has trebled? For some other services, the apparently higher productivity may be due to the debasement of the product. **A lot of the increases in retail service productivity in countries like America and Britain have been a result of lowering the quality of the retail service itself—fewer shop assistants, longer drives to the supermarket, lengthier waits for deliveries, etc. There are some service activities, such as finance, telecommunications and transport, which have had fast productivity growth in recent periods—sometimes even faster than those of some sub-sectors of manufacturing. However, these are mostly "producer" services, for which the main customers are manufacturing firms, so their growth is in large part dependent on the vitality of the manufacturing sector.** Moreover, when it comes to financial services, the 2008 financial crisis has revealed that much of the recent productivity growth had been due to "financial innovations" that obscured (rather than genuinely reduced) the riskiness of financial assets, thereby allowing the financial sector to raise its productivity at an unsustainable rate. **With the forthcoming tightening of financial regulation across the world, productivity growth in financial services will significantly slow down. But, one may ask, if de-industrialisation is due to the very dynamism of a country's manufacturing sector, isn't it a good thing** Not necessarily. **The fact that de-industrialisation is mainly caused by the comparative dynamism of the manufacturing sector vis-à-vis the service sector does not tell us anything about how well it is doing compared with its counterparts in other countries.** If a country's manufacturing sector has slower productivity growth than its counterparts abroad, it will become internationally uncompetitive, leading to balance-of-payments problems in the short run and falling standards of living in the long run. In other words, de-industrialisation may be accompanied by either economic success or economic failure. **Even if it is of the "successful" variety, deindustrialisation is likely to have a negative effect on a country's balance of payments because services are inherently more difficult to export.** At the root of the low "tradability" of services lies the fact that many require their providers and consumers to be in the same location. **No one has yet invented ways to provide long-distance hairdressing or house cleaning. Of course, this problem will be solved if the service provider** (the hairdresser or the cleaner in the above examples) **can move to the customer's country, but that in most cases means**

**immigration, which most countries restrict heavily.** Given this, a rising share of services in the economy means that the country, other things being equal, will have lower export earnings. **Unless the exports of manufactured goods rise disproportionately, the country will not be able to pay for the same amount of imports as before.** If its de-industrialisation is of a negative kind accompanied by weakening international competitiveness, the balance-of-payments problem could be even more serious. To be sure, not all services are equally non-tradable. **There are some high-value producer services that are highly tradable, such as banking, consulting and engineering.** However, even in Britain, which is most advanced in the exports of these services, the trade surplus they generate is well below 4% of GDP, just enough to cover the country's manufacturing trade deficits. In the case of America, the surplus is less than 1% of GDP, nowhere near enough to make up for its manufacturing trade deficits, which are also around 4% of GDP. America has been able to maintain such a large manufacturing trade deficit only by borrowing heavily from abroad. **Moreover, a country's ability to export many of these producer services cannot be maintained in the long run without a strong manufacturing sector. In services like engineering and design, insights gained from the production process are crucial. Given this, a weakening manufacturing base will eventually lead to a decline in the quality, and exportability, of these services. While a simplistic "manufacturing good, services bad" viewpoint is unwarranted, we undervalue the manufacturing sector at our peril.** It has been at the foundation of human material, and social, progress at least since the Industrial Revolution and it is likely to remain so in the foreseeable future.

## Green tech key to the economy

### **Clean tech solves job growth and the economy – California proves**

**Green Technology 14** (non-profit initiative designed to inform government efforts toward sustainability, “Growing the Economy with Green Jobs,” [http://www.green-technology.org/green\\_technology\\_magazine/transitioning-into-the-real-green-economy-an-interview-with-davi/growing-the-economy-with-green-jobs/](http://www.green-technology.org/green_technology_magazine/transitioning-into-the-real-green-economy-an-interview-with-davi/growing-the-economy-with-green-jobs/))

**California’s clean tech sector is the largest in the country, and** according to a recent fact sheet on job creation and economic redistribution by the BlueGreen Alliance, it **is poised to be a major factor in growing the state’s economy.**

The report, which gathered statistics from an array of sources, says that **in spite of the economic recession with its loss of jobs and 11 percent unemployment, California could make tremendous gains through investing in its green sectors. The clean tech economy** expanded at a rate of 8.3 percent at the height of the recession, the report states, and **added more than a half-million jobs from 2003 to 2010. This by far outpaced the rest of the California economy, which lost jobs during that time. In fact, in 2010, when California had a 7 percent job loss, it’s green manufacturing showed an increase of 1 percent.** While they represent only 2 percent of overall jobs in

California, over half of the 318,000 green jobs had an annual wage of over \$46,000. The report also notes that **California’s public policies support its green economy with financial incentives, renewable portfolio standards, energy efficiency resource standards and regional cap-and-trade programs.** According to the BlueGreen Alliance’s executive director David Foster [see accompanying interview], “We focus very much on trying to advocate for public policies that reflect the need for us to create jobs by taking on these big environmental problems...**The landmark role that California has played in passing high environmental standards provides the necessary framework for the creation of these green economies. Far from regulations being a detriment to the economy, I see them as very fundamental foundations for making it work.**” The Alliance highlights California’s Renewable Portfolio Standard of 33 percent by 2020 as a vehicle that could generate over 50,000 new green collar jobs, and investments in public transportation will create 64,000 green jobs. **Money saved by consumers and business owners through energy efficiency measures have not only redirected \$56 billion from paying for energy to purchasing other goods and services. These savings have also created some 1.5 million jobs with a payroll of \$45 billion.** Among the fastest growing sectors in clean tech in California are the smart grid, renewable energy, fuel cells, solar thermal and wind industries. **A shining example of job creation resulting from sustainable programs are the more than 115,000 green jobs created by the collecting and processing of recyclable materials. If the nation achieved a 75 percent recycling rate, there would be 1.5 million jobs created by 2030.**

### **Renewables policy boosts economy and job growth**

**Wall Street Journal 10** – renowned source of quality news about global events [The Wall Street Journal, “White House Officials Link Economic Recovery to CO2 Bill” <http://blogs.wsj.com/economics/2010/03/16/white-house-officials-link-economic-recovery-to-co2-bill/>, March 16, 2010 accessed 7/19/14] JW

**Senior Obama administration officials say the nation’s economic recovery could stall if Congress doesn’t pass a climate bill this year.¶ The officials warn that investors are so uncertain about the future cost of emitting greenhouse gases that they are sitting on capital rather than pouring it into “clean” technology, new power plants or energy-intensive manufacturing.¶** The administration has for months been moving away from advocating climate legislation primarily as an environmental issue and toward a jobs-creation argument. But the comments are a marked shift to a stronger rhetoric: fears of prolonging the recession. **The White House says spurring “clean,” or low-greenhouse-gas-emitting energy, can help lay the foundation for the 21st-century U.S. economy.¶ “Right now there’s a lot of money on the sidelines,” said Energy Secretary Steven Chu. “Capital on hold means investments not being made, investments not being made means jobs not being created,”** he said at an Export-Import Bank conference last week.¶ **Companies that could capitalize on a carbon-constrained**

**economy, such as General Electric Co., Alstom SA, Areva, Babcock & Wilcox, a unit of McDermott International, Siemens AG, Chesapeake Energy Corp. and First Solar Inc., say policy clarity will focus investment.** So do emitting businesses that will need to adapt, such as American Electric Power Co. and BP PLC.

## **Algae key to economic growth**

### **Algae growing now, developing new applications is key**

**SIDS 14** [UN INTERNATIONAL CONFERENCE ON SMALL ISLAND DEVELOPING STATES (SIDS) 2014, <http://www.sids2014.org/content/documents/275BEconcept.pdf>, accessed 7/17/14]RMT

The global market for marine biotechnology products and processes is currently estimated at US \$ 2.8 billion and projected to grow to around US\$ 4.6 billion by 2017. Marine biotech has the potential to address a suite of global challenges such as sustainable food supplies, human health, energy security and environmental remediation <sup>32</sup> . Marine bacteria are a rich source of potential drugs. In 2011 there were over 36 marine derived drugs in clinical development, including 15 for the treatment of cancer. One area where marine biotech may make a critical contribution is the development of new antibiotics <sup>33</sup> . The potential scope is enormous, by 2006 more than 14,000 novel chemicals had been identified by marine bioprospecting and 300 patents registered on marine natural products <sup>34</sup> . On the energy front algal biofuels offer promising prospects. The European science Foundation postulates a production volume of 20-80 thousand litres of oil per hectare per year can be achieved from microalgal culture, with even the lower part of this range being considerably higher than terrestrial biofuel crops <sup>35</sup> .

# Tech innovation key to the economy

## **Technological innovation is key to the economy**

**Technet 11** (Technet.org. "America's Technology Leaders Assert Innovation Key to Nation's Recovery and Global Competitiveness."

Technet.org. N.p., 1 Jan. 2011. Web. 17 July 2014. <<http://www.technet.org/america%E2%80%99s-technology-leaders-assert-innovation-key-to-nation%E2%80%99s-recovery-and-global-competitiveness/>>. TechNet is the national, bipartisan network of CEOs that promotes the growth of technology industries and the economy by building long-term relationships between technology leaders and policymakers and by advocating a targeted policy agenda. TechNet's members represent more than one million employees in the fields of information technology, biotechnology, e-commerce and finance. TechNet has offices in Washington, DC, Palo Alto, Sacramento, Seattle, Boston and Austin. Fred/John/Eric).

Washington, DC – Nearly 60 executives from TechNet, the bipartisan policy and political network of CEOs that promotes the growth of the innovation economy, assemble in Washington, D.C. this week for the organization's annual CEO fly-in to meet with America's policy leaders and advocate for innovative policy solutions to create jobs and grow the U.S. economy.¶ The TechNet executives are meeting with senior Obama Administration officials and an array of bipartisan Congressional leaders to advocate for a robust innovation policy agenda comprised of three critical areas: improving the nation's education system and human capital support; fostering a globally competitive business climate including comprehensive tax reform; and driving investment for clean technology and 21st century energy solutions.¶ "To win the future, America must invest in innovation and the future discoveries that will create good paying jobs for more of our people," said Rey Ramsey, President and CEO of TechNet. "To reach this goal, we must make the smart policy choices on R&D, education, comprehensive tax reform, high skilled immigration and protecting intellectual property. These are fundamental kitchen table issues that will help grow jobs here in America. Our message to our policy leaders is that we will work with you to ensure that America remains the world's center of innovation and economic growth."¶ TechNet 2011 Federal Public Policy Priorities¶ TechNet is committed to advancing U.S. competitiveness, economic growth and job creation. Public policies and private sector initiatives that spur our nation's innovation-driven economy are essential to the nation's economic recovery. By focusing our activities a few key issues, TechNet maximizes its impact on those public policy issues most affecting the national economy.¶ Fostering a Globally Competitive Business Environment. Fifty years ago, 64% of the world's 250 largest industrial companies were headquartered in the United States. Today only 34% of the world's 500 largest companies are based here. While America's economic leadership is at risk, our citizens possess the talent, intellect and entrepreneurial spirit to maintain our economic and national security. To preserve America's economic leadership TechNet promotes public policy to create a national environment ripe for the kind of innovation and risk taking that drive economic growth and job creation. This year, TechNet's will focus its work on:¶ Tax Policy. America's outdated corporate tax code has put U.S. employers at a competitive disadvantage in today's global economy. Currently, more than \$1 trillion in American businesses' earnings are trapped overseas. We should move now to allow these businesses the freedom to bring this money home and invest it back into our still fragile economy. The basic operating rules of our international tax system were put in place some 50 years ago and the last significant overhaul of our tax system in 1986, 25 years ago. The world has changed dramatically since that time. In fact, many TechNet companies did not exist 25 years ago. The time has come to modernize America's corporate tax system to keep the U.S. competitive in the new global economy.¶ Trade. More than 60 percent of the technology industry's sales are overseas; as the world becomes ever more connected, that number will continue to grow. TechNet supports greater market access through the adoption of foreign trade agreements still pending before Congress and working with the U.S. government to identify new market opportunities and protect companies from unfair trade practices.¶ Broadband and Internet Policy. TechNet supports policies that drive the growth and vitality of a safe, secure and free Internet as well as the next generation of communications. TechNet believes the FCC's national broadband plan can represent the "North Star" for future American leadership in innovation and supports the implementation of that plan.¶ Basic Research. TechNet supports strong national investments in research and development through increased federal funding for basic research and a permanent R&D tax credit.¶ Clean Technology: Spurring the Next Great Global Industry. With four billion users worldwide, the \$6 trillion energy market is the largest economic opportunity of the 21st century. Clean energy can create millions of jobs and address the challenges of national, economic and environmental security our nation faces today. But right now, the U.S. lags behind other nations in the race to become the leader in the next great global industry. While America continues to spend \$1 billion on foreign fuel each day, China is investing 10 times more in clean power, as a percentage of the gross domestic product, than the United States. For the U.S. to become the global leader in this emerging industry, the federal government and private sector must work together to ensure promising clean energy technologies can reach the commercial market. When it comes to clean energy technologies, TechNet supports:¶ Smart federal investments. The energy industry is capital intensive – with the most significant costs in the early stages of development. Federal

support of clean energy research, development and deployment programs like ARPA-E and CEDA that help drive innovation in this capital intensive industry.¶ Tax incentives. The direct costs of early adoption can initially run higher than existing energy solutions. Tax incentives and payment in lieu of tax programs have proven invaluable in helping to promote adoption. TechNet supports vital tax incentives programs such as the Advanced Energy Manufacturing Tax Credit (48c) and the Section 1603 Renewable Energy Grant Program as essential for the industry to achieve scale and drive down costs.¶ Smart grid. TechNet is committed to modernizing the nation's electrical infrastructure and turning this aging network into a truly integrated, smart grid equipped with the technologies, capacity and reach to meet the nation's energy demands for the next generation. TechNet supports greater empowerment of consumers to allow them more control of their individual energy consumption and federal investments and regulations to help accelerate the transition to a modern grid.¶ Building a 21st Century Workforce. America's economic leadership is a reflection of our historic national commitment to a quality education for everyone. But other countries are surpassing the U.S. in preparing their children for the jobs of tomorrow. Today, the U.S. is 29th out of 109 countries in the percentage of 24-year-olds with a math or science degree. Innovation and economic growth require a world-class workforce. TechNet support policies that ensure our nation has the knowledge workers who will drive economic growth today and into the future.¶ Education. The public and private sectors must work together to develop initiatives to improve science and math education; increase the number of Americans attaining degrees in science, technology, engineering and mathematics; and increase the opportunities to bring new, relevant technologies into the classroom.

## **Innovation is a key driver of economic competitiveness**

**Gallagher '12** (Dr. Patrick Gallagher, Under Secretary of Commerce for Standards and Technology and NIST Director, June 20, 2012, Innovation as a Key Driver of Economic Growth & Competitiveness, <http://www.nist.gov/director/speeches/innovation-summit.cfm>, 7/19/14, JX)

**Well over half of the economic growth in this country since the end of World War II has been directly attributable to technological innovation. It accounts for most of the positive difference in per capita income. It drives almost all of the growth in economic output and productivity. And it's really the key to competitiveness for almost every company that's there. If you look at how innovative companies are, you can directly correlate that with how competitive and successful they are.** So in the midst of one of the deepest recessions this country has had since the Great Depression, the reason we're talking about **innovation** is because it matters. It **drives our economy**. The other problems, or a thought about innovation, is that we tend to talk about innovation in the context of its moving parts. We talk about research and development, the generation of new ideas, science, obviously a critical part. We talk about the role of the creative engines of innovation, the entrepreneurial community, the risk takers, the ones who have that vision and took a chance to make it happen. Increasingly, we're talking about manufacturing, the producers, the ones who take those ideas to scale and generate the products and services in our economy. It's actually an interesting development, as an aside, that the focus on manufacturing, from my perspective, was an inevitable consequence —I didn't foresee it coming—but it was an inevitable consequence of raising innovation as a centerpiece. And one of the reasons for that is that's where a lot of the innovation takes place.



# **STEM key to the economy**

## **Science innovation key to the economy**

**Swanson and Kelly 14** (Swanson and Kelly, William and Brian. "STEM Proficiency: A Key Driver of Innovation, Economic Growth and National Security." *US News*. U.S. News & World Report, 23 Apr. 2014. Web. 17 July 2014. <<http://www.usnews.com/news/stem-index/articles/2014/04/23/stem-proficiency-a-key-driver-of-innovation-economic-growth-and-national-security>>. William H. Swanson is the chairman and CEO of Raytheon Company. Brian Kelly is the editor of U.S. News & World Report. Fred).

STEM: what a terrible acronym. It's one of those awkward labels that become accepted shorthand for a wonky policy topic because no one can figure out a better way to say it. But don't let clunkiness obscure significance. STEM is also an under appreciated, and troubling, component of the U.S. economy. The real meaning behind "STEM" is the mismatch between supply and demand in a key part of the country's labor pipeline. The demand for the many jobs requiring STEM skills—science, technology, engineering and math—is outstripping the supply, and the problem will only get worse.¶ That's what we found when we crunched the numbers in the first-ever STEM Index, a basket of data measuring the state of STEM jobs and education since 2000. We wanted to impose some metrics on a much-discussed but ill-defined subject that has become a concern for most major industries in the U.S. STEM proficiency is a key driver of innovation, economic growth and ultimately national security. For instance, some of the most coveted and scarce skills today are in the fields of cybersecurity.¶ [SPECIAL REPORT: The U.S. News/Raytheon STEM Index]¶ But STEM is not just about tech companies. It's not just about people who wear lab coats. STEM skills are needed in the many millions of jobs that will have to be filled in sectors such as energy, manufacturing, food production and perhaps most significantly, health care. What industry does not need more workers with science and math know-how? And not just at the high end. Having STEM skills could mean making it into the middle class, or not.¶ Going back to studies like the seminal "Rising Above the Gathering Storm" report of 2005, the problem has been a focus of much attention. But we wanted to add some new rigor by creating a unique set of data that looked at how the U.S. has fared in tackling this supply-demand challenge. We plotted dozens of statistics that measured student test performance, aptitude, and interest against job demand (read the full methodology). The result is a 14-year average that tells an important part of the STEM story, with limits. Our new benchmark, the U.S. News/Raytheon STEM Index, is a starting point that's meant to lead to deeper discussions, and ultimately solutions. And of course any broad-based graph can only tell you so much; the analyses behind the component parts are ultimately the most revealing.¶ What the numbers tell us is that the country has made little progress on a problem we've seen coming for a long time. Despite growing job demand, the pipeline of talent is weak and will remain that way for at least a decade if nothing changes. There are some recent glimmers of hope, reflected in an uptick over the past two years, but they are coming from a select part of the population. Our top-line data, supported by other studies, shows that some portion of white males, along with Americans of Asian descent, are increasingly drawn to STEM subjects, while those who represent the bulk of the future labor pool—women, Latinos and African-Americans—are showing disproportionately little interest.¶ The increased demand for STEM skills is evident despite a key shortcoming in the STEM Index: our need to rely on federal government data. Using the sometimes out-of-date definitions of what is a STEM job, the Index still charts a 30 percent growth, from 12.8 million in 2000 to 16.8 million in 2013. More granular estimates put actual jobs requiring STEM skills at as much as 50 percent of the job market. We'll be refining that and other data for next year's edition.¶ Among the biggest problems surfaced in the STEM Index:¶ Between 2000 and 2013, an average of 37.6 percent of high school males reported having interest in at least one of the STEM disciplines, vs. 14.8 percent of females.¶ In 2013, the average SAT math score for white students was 534, compared to 461 for Hispanic students and 429 for black students. The average ACT science scores were 22 for whites, 18.8 for Hispanic students and 16.9 for black students.¶ As high school students' interest in STEM has waned, their scores on international assessments like PISA have also dropped. In 2000, the average U.S. PISA math score was 493. In 2012, that score dropped to 481. Relative to other developed countries, we remain near the back of the pack.¶ STEM may be a simple label, but the problem it speaks for is deeply complex. Why do fourth-grade girls sour on math? Teacher prep programs ignore science training? University curriculums wash out too many talented students? The solutions require the interaction of industry, academia, government and non-profits.¶ There is work being done in all these areas, but the evidence suggests it is not enough. Better awareness and more-realistic assessments are important next steps. This new STEM Index is a start.

## **STEM is essential to innovation and stimulating the economy**

**Rothwell 13** (Rothwell, Jonathan. *The Hidden STEM Economy*. N.p.: n.p., n.d. Brookingsinstitute.com. 1 June 2013. Web. 17 July 2014. <<http://www.brookings.edu/~media/research/files/reports/2013/06/10%20stem%20economy%20rothwell/thehiddenstemeconomy610.pdf>>.

Jonathan Rothwell is a fellow at the Metropolitan Policy Program at Brookings. His research covers a variety of topics on the sources of regional and national economic growth and prosperity with a focus on human capital and innovation. He has written Brookings reports on the labor market for education and skills, the economic consequences of patents and science and technical knowledge, the cleantech industry, and how land regulations create income segregation and unequal access to high-performing public schools. He holds a Bachelor of Science degree from Penn State, a master's degree in economics from the New School, and a doctorate in policy from Princeton University. Fred/Eric/John).

Innovation—primarily through the invention, development, and profusion of new technologies—is the fundamental source of economic progress, and inventive activity is strongly associated with economic growth in metropolitan areas and nationally.<sup>2</sup> Technological innovation, in turn, usually requires the expertise of specialists with knowledge in fields of science, technology, engineering, and mathematics (STEM).<sup>3</sup> The notion that scientific and technical knowledge are important to American living standards, is embodied in the Constitution, which explicitly gave Congress the power to “promote the progress of science and useful arts” by granting patents to inventors. The federal government’s explicit commitment to provide funding to enhance the STEM labor supply and promote research can be traced to Vannevar Bush, who helped initiate the National Science Foundation (NSF) with his 1945 report to President Roosevelt. Since then, reports from the NSF have emphasized the need for STEM education.<sup>4</sup> More recently, national leaders from both major political parties have acknowledged the importance of STEM education. In 2006, President George W. Bush launched the American Competitiveness Initiative to improve STEM education and increase the supply of working scientists.<sup>5</sup> Likewise, President Obama frequently mentions the importance of STEM education in his speeches. He also created the “Educate to Innovate” campaign to boost STEM education, and signed into law a reauthorization of the Bush-era America Competes Act, which embodies many of the same goals as the Bush administration’s STEM priorities. During the 2012 campaign, both President Obama and his Republican challenger, Mitt Romney, proposed policies to increase the supply of STEM workers, and the Obama administration’s latest budget has a number of initiatives designed to meet that goal, related largely to improving the quality of K-12 STEM education.<sup>6</sup> STEM has attracted attention not only in policy spheres, but also in the research arena. Notable reports from the NSF, the U.S. Department of Commerce, and Georgetown University’s Center on Education and the Workforce have documented significant labor market advantages for those employed in STEM fields, including relatively high wages, lower unemployment rates, and growing job opportunities.<sup>7</sup> Academic research on the whole supports the notion that STEM knowledge is highly rewarded at least in engineering and computer fields.<sup>8</sup> Yet some scholars doubt the claim that there is a shortage of scientists, pointing out that research scientists earn lower wages than doctors and lawyers, which signals an oversupply, and that competition for academic positions and federal grant money is high.<sup>9</sup> Academic debate and public policy, however, have been hampered by the lack of a precise definition of what constitutes STEM knowledge and employment. With few exceptions, previous studies have used a binary classification of jobs as STEM or not STEM, overlooking variation in the level of STEM knowledge required and relying on unstated assumptions about what constitutes STEM employment.<sup>10</sup> Perhaps as a result, the occupations classified as STEM by the NSF as well as its critics have been exclusively professional occupations. These classifications have neglected the many blue-collar or technical jobs that require considerable STEM knowledge.<sup>11</sup> In *Rising Above the Gathering Storm*, a National Academy of Sciences book, the authors emphasize PhD training in science and even K-12 preparation, but they offer no assessment of vocational<sup>12</sup> or practical training in science and technology. Aside from the Georgetown study, none of the many prominent commentaries has considered the full range of education and training relevant to workers who use STEM skills, and none has considered that blue-collar or nonprofessional jobs might require high-level STEM knowledge.<sup>13</sup> Notwithstanding the economic importance of professional STEM workers, high-skilled blue-collar and technical STEM workers have made, and continue to make, outsized contributions to innovation. Blue-collar machinists and manufacturers were more likely to file a patent during the Industrial<sup>14</sup> Revolution than workers in professional occupations.<sup>15</sup> U.S. industrialization coincided with a “democratization of invention” beyond professional workers and researchers.<sup>16</sup> In 1957, one economist criticized the National Academy of Sciences for overemphasizing PhD researchers, when evidence suggested that they were the minority of inventors, and that roughly half of patent holders had not even completed a college degree.<sup>17</sup> At the same time, between the late nineteenth century and the 1950s, wages for manufacturing workers grew faster than wages for professional workers.<sup>18</sup> The economy has obviously changed since then. Formal education in a science or technology field is more important than ever to providing the skills required to invent.<sup>19</sup> One recent survey found that 94 percent of U.S. patent inventors between 2000 and 2003 held a university degree, including 45 percent with a PhD. Of those, 95 percent of their highest degrees were in STEM fields, including more than half in engineering.<sup>20</sup> Still, most innovators— inventors or entrepreneurs—do not have a PhD, and the vast majority is employed outside of academia.<sup>21</sup> Today, there are two STEM economies. The professional STEM economy of today is closely linked to graduate school education, maintains close links with research universities, but functions mostly in the corporate sector. It plays a vital function in keeping American businesses on the cutting edge of technological development and deployment. Its workers are generally compensated extremely well.<sup>22</sup> The second STEM economy draws from high schools, workshops, vocational schools, and community colleges. These workers today are less likely to be directly involved in invention, but they are critical to the implementation of new ideas, and advise researchers on feasibility of design options, cost estimates, and other practical aspects of technological development.<sup>23</sup> Skilled technicians produce, install, and repair the products and production machines patented by professional researchers, allowing firms to reach their markets, reduce product defects, create process innovations, and enhance productivity.<sup>24</sup> These technicians also develop and maintain the nation’s energy supply, electrical<sup>25</sup> grid, and infrastructure. Conventional wisdom holds that high-skilled, blue-collar jobs are rapidly disappearing from the American economy as a result of either displacement by machines or foreign competition. But the reality is more complex. High-skilled jobs in manufacturing and construction make up an increasingly large share of total employment, as middle-skilled jobs in those fields wane.<sup>26</sup> Moreover, workers at existing STEM jobs tend to be older and will need to be replaced.

## **STEM research is necessary for the US to advance**

**Adkins, 2012** (Rodney C. Adkins, "America Desperately Needs More STEM Students. Here's How to Get Them," Forbes, July 9<sup>th</sup> 2012, <http://www.forbes.com/sites/forbesleadershipforum/2012/07/09/america-desperately-needs-more-stem-students-heres-how-to-get-them>)

**There is no doubt that to advance our economy and our society we need to create the next great technology innovations, not just consume them. That's why there is such urgency for the U.S. to develop a stronger workforce of experts in science, technology, engineering, and math (STEM). After all, according to the U.S. Department of Labor, only 5% of U.S. workers are employed in fields related to science and engineering, yet they are responsible for more than 50% of our sustained economic expansion. STEM-related disciplines are responsible for many of the societal innovations that make our world better.** Last week, for example, IBM's Sequoia supercomputer at the Lawrence Livermore National Laboratory set a world record in computing speed by breaking the 16 petaflop barrier. That represents an astounding 16,000 trillion calculations per second. What could be done with that kind of computing power? Sequoia could run a simulation of how the human heart reacts to new medicine in two days instead of two years. It could provide a 40-fold improvement in the prediction of earthquakes to help provide safer evacuation routes. Sequoia is a powerful example of what American ingenuity in STEM-related disciplines can mean for the betterment of society. **So it is clear that to benefit our economy and society, our national priority should be on encouraging more students to study STEM. Unfortunately, the U.S. is trending in the opposite direction. When I graduated from college, about 40% of the world's scientists and engineers resided in the U.S. Today that number has shrunk to about 15%.**

## **Energy development key to jobs**

### **Terrestrial development proves – energy development key to job growth**

**Gillespie, June 25 2014** (Patrick Gillespie, “Energy boom fuels economic growth in Midwest states”

Island Packet <http://www.islandpacket.com/2014/06/25/3182034/energy-boom-fuels-economic-growth.html#storylink=cpy> accessed 7/16/14 tm)

Oil and gas extraction drove 14 percent of the GDP growth in Texas, a diverse state economy that’s the nation’s second largest.

The number of post-recession oil-and-gas drilling jobs in Middle America is also quickly rising. Oklahoma had 43,800 mining employees in 2010; last year it had nearly 60,000 \_ a 36 percent jump.

**“States that have active energy activity, a lot of energy activity, are doing better on average than states that do not,” said Michael Canes, an energy expert at Logistics Management Institute, a private consulting firm in McLean, Va. “People have become aware that energy offers opportunities for people \_ for jobs and incomes in the United States.”**

Midwestern states had, on average, a 5.6 percent unemployment rate in May, according to the Bureau of Labor Statistics. That’s below the national rate of 6.3 percent. With oil and gas drilling growing domestically, the U.S. can become less dependent on foreign oil and open doors to export its oil to other countries, experts said.

**“This is a game changer,” said Anderson, the Bank of the West economist. “This is a structural shift in how the U.S. economy is going to produce growth in the future. It certainly is a positive story for the U.S. trade balance, which has been deteriorating significantly since the 1970s.”**

## Ocean key to trade

key to economy – allows for international trade and jobs

Joint Ocean Commission Initiative (JOCI, organization that works with all sectors of the ocean community to encourage action and monitor progress toward meaningful ocean policy reform) ‘11

[“America’s Ocean Future Ensuring Healthy Oceans to Support a Vibrant Economy” JOCI, June 2011]

oceans, coasts, and Great Lakes provide this nation with food, energy, desirable places to live, recreation, and tourism activities, and are the major avenue for U.S. international trade activities. Continued provision of many of these goods and services is highly dependent on the health of ocean and coastal ecosystems. Among the many benefits of properly functioning ocean and coastal ecosystems are seafood, climate regulation, disease and pest regulation, coastal protection, detoxification, fuel wood, wildlife habitat, sediment trapping, and numerous aesthetic, spiritual, educational, and recreational benefits. The oceans, coasts, and Great Lakes produce goods and services that support the livelihoods of many Americans every year. In 2007, coastal counties contributed almost \$8 trillion to U.S. gross domestic product and 69 million jobs. Many of these jobs are provided by ocean-dependent sectors, including commercial and recreational fishing, tourism, shipping, offshore energy exploration and production, boating, wildlife watching, beach going, military and national security activities, and scientific and academic endeavors. Many of these are good jobs that depend on close proximity to America’s coasts and therefore cannot be shipped abroad.

## **Oceans substantial to U.S. economy (general)**

Joint Ocean Commission Initiative (JOCI, organization that works with all sectors of the ocean community to encourage action and monitor progress toward meaningful ocean policy reform) ‘11

[“America’s Ocean Future Ensuring Healthy Oceans to Support a Vibrant Economy” JOCI, June 2011]

As illustrated below, our oceans and coasts make a substantial contribution to the U.S. economy: • From 2007 to 2009, the average annual value of U.S. marine fisheries landings was \$4 billion. In 2010, 1.5 million jobs were associated with the U.S. commercial fishing industry yielding over \$45 billion in income. • In 2006, saltwater anglers spent more than \$30 billion, representing more than \$80 billion in total economic impact and supporting 500,000 jobs. In the Great Lakes, recreational fishing generated more than \$7 billion in total economic output, \$2 billion in income, and supported more than 58,000 jobs. • In 2010, the value of imports through U.S. ports was almost \$2 trillion, and in 2008, commercial ports supported 13 million U.S. jobs. Ports that accommodate oceangoing vessels move 99.5 percent of U.S. overseas trade by volume and 64 percent by value. Compared to 2001, total freight moving through U.S. ports will increase by more than 50 percent by 2020. In 2007, the leisure and hospitality industry in U.S. coastal states supported almost 11 million jobs and more than \$214 billion in wages. The cruise ship industry and its passengers contribute another \$12 billion in spending every year. • The oceans contain approximately \$8 trillion in oil and gas reserves. Of the 368,000 jobs tied to Gulf of Mexico offshore operations in 2011, coastal states account for about 270,000, with nearly 98,000 jobs in non-coastal

states. It is projected that total Gulf of Mexico spending by the offshore energy industry will be approximately \$41 billion in 2013, 73 percent of which will be in Alabama, Louisiana, and Texas.

## Climate advantage turns the case – economic growth

### Climate change impacts growth rates – empirics prove

Dercon, 2014

(Stefan, Policy Research Working Paper 6936 "Is Green Growth Good for the Poor?" June 24 2014  
[http://www.wds.worldbank.org/servlet/WDSCContentServer/WDSP/IB/2014/06/24/000158349\\_20140624092056/Rendered/PDF/WPS6936.pdf](http://www.wds.worldbank.org/servlet/WDSCContentServer/WDSP/IB/2014/06/24/000158349_20140624092056/Rendered/PDF/WPS6936.pdf) accessed tm 7/16)

**Unfortunately, engineering these growth and poverty reduction processes in a world of environmental change is problematic. It is generally acknowledged that the pressures of climate and other environmental changes will have serious implications for the growth prospects of some of the poorest countries in the developing world over the coming decades** (IPCC 2007; World Bank 2010a). Changes in climatic conditions will change the mean return to agriculture and increase its variance. **Furthermore, the increased impacts of extreme weather events will affect the accumulation of productive assets**, not least in low-lying areas such as coastal cities, where the potential returns to economic activity are especially high. These effects are also likely to accelerate the depletion of many forms of environmental capital and increase threats to human health from disease and water scarcity. **The impacts of climate change on agriculture and other sectors of the economy are bound to affect the scope for their transformation from economies that are largely dependent on agriculture to a more diversified, higher-return economy.**

### Climate change intensifies resource competition

Koubi, Vally, et al. 2012

("Climate variability, economic growth, and civil conflict." *Journal of Peace Research* 49.1 (2012): 113-127. Sage publications, AW)

**One major consequence of global warming could be greater scarcity and variability of renewable resources in many parts of the world** (IPCC, 2001, 2007). With increasing concerns about such global effects of climate change, **a group of scholars**, commonly referred to as neo-Malthusians, **posits that climate change is a threat to international security because it could increase resource scarcity** (WBGU, 2008; Homer-Dixon, 1999; Homer-Dixon & Blitt, 1998; Bächler et al., 1996).

### Climate change reduce economic growth intensifies civil conflict

Koubi, Vally, et al. 2012

("Climate variability, economic growth, and civil conflict." *Journal of Peace Research* 49.1 (2012): 113-127. Sage publications, AW)

**Previous research has shown that reduced levels of domestic economic activity tend to create incentives for conflict.**<sup>4</sup> **Building on this research, we posit that climate change, by reducing economic growth, affects the utility of individuals and groups to engage in civil conflict. It does so in two ways: first, negative climatic conditions, via their negative effect on economic growth, can reduce resources available to the government** (e.g. by reducing tax revenue). The government thus has fewer resources to invest in people, for instance to provide better nutrition, schooling, and on-the-job training that would lead to improved living conditions. **It also has fewer resources to provide for the people, for example in terms of sustaining peace through the maintenance of law and order** – the latter, for

instance, lowers the probability of rebel victory by increasing the cost of rebellion. **Second, climate-related phenomena, such as lower precipitation, higher temperature, and extreme weather events lead to lower personal income from production and also decrease the opportunity for future employment.** Consequently, the opportunity cost of rebellion decreases because the expected returns from peaceful employment, say farming, compared to joining criminal or insurgent groups are lower. In situations like these, **when individuals expect to earn more from criminal or insurgent activity than from lawful and peaceful activity, predatory behavior becomes more likely.** The latter implicates conditions in which each individual or group effort to increase its own welfare reduces the welfare of others and also increases the probability of mutual attacks (Jervis & Snyder, 1999). **The argument that poverty breeds conflict and war is supported by several empirical studies** (e.g. Hidalgo et al., 2010; Dube & Vargas, 2008; Hegre & Sambanis, 2006; Collier & Hoeffler, 2004; Miguel et al., 2004; Fearon & Laitin, 2003). For example, Collier & Hoeffler (2004) find that low economic growth, which is a proxy for foregone earnings, increases the risk of conflict. Dube & Vargas (2008) show that a drop in the price of coffee substantially increased the incidence and intensity of intrastate conflict in coffee-intensive areas in Colombia in 1994–2005. **They attribute this result to the lowering of opportunity costs of joining a rebel movement (via depressed wages) in these areas.** Hidalgo et al. (2010) also show that land invasions by the rural poor in Brazil occur immediately after adverse economic shocks, which in the statistical analysis are instrumented by rainfall.

**Climate change hurts economic growth and intensifies conflict as a result – we solve economic decline and climate change by addressing climate change**

**Koubi, Vally, et al. 2012**

("Climate variability, economic growth, and civil conflict." *Journal of Peace Research* 49.1 (2012): 113-127. Sage publications, AW)

First, while most of the existing literature empirically tests the climate–conflict hypothesis in the form of a direct relationship, we submit **that climatic changes are likely to affect the potential for violent conflict via negative effects on economic growth** – an argument also adopted in the empirical works of Miguel, Satyanath & Sergenti (2004). **Hence our theoretical argument specifies a causal pathway leading from climatic conditions through economic growth to civil conflict, and our empirical analysis is designed to test this two-step causal argument.** Second, we argue that political system characteristics, notably democracy, may mediate conflict-promoting effects of sluggish economic growth. **By implication, we argue that democratic systems are likely to be better equipped for avoiding violent conflict when climatic changes reduce economic growth.** Third, we employ a measure of climate variability that we think is better suited for identifying the effects of climatic developments on the probability of civil conflict. **This measure takes into account that choices regarding production structures (e.g. crop choices, methods of cultivation, choices regarding infrastructures and energy production) tend to be climate-specific and are also adapted to persistent changes in climatic conditions.**



## **Climate change turns the DA – poverty impacts**

### **Climate change intensifies poverty impacts**

**Dercon, 2014**

(Stefan, Policy Research Working Paper6936 “Is Green Growth Good for the Poor?”June 24 2014  
[http://www.wds.worldbank.org/servlet/WDSCContentServer/WDSP/IB/2014/06/24/000158349\\_20140624092056/Rendered/PDF/WPS6936.pdf](http://www.wds.worldbank.org/servlet/WDSCContentServer/WDSP/IB/2014/06/24/000158349_20140624092056/Rendered/PDF/WPS6936.pdf) accessed tm 7/16)

**A first feature of much environmental change is the gradual erosion of the environmental capital base in many rural settings that affects the livelihoods of the poor, such as loss of forests, soil erosion, depletion of fish stocks, and water scarcity. Lower environmental capital makes income generation more difficult and affects wealth accumulation. Given credit market imperfections, this situation will affect entry into more profitable activities, including the potential exit from agriculture or diversification into other higher - return activities. Climate change is likely to accelerate these pressures, with some winners and many losers in terms of the potential for agricultural production and other climate - dependent activities. A higher frequency of extreme weather events and disasters, including droughts and floods, will put further pressure on rural livelihoods and will contribute to the poverty persistence cycles described above as investments focus on minimal livelihood security rather than higher returns and assets are lost without scope for recovery. In urban settings, livelihoods are also affected by environmental change, not least in many industrial or informal sector activities that are dependent on water and local fuel sources, such as wood. The lives of the urban poor are further blighted by increased scarcity of clean water and air, pressures on sanitation, and the risk of disease. In both rural and urban areas, climate change and extreme events also erode infrastructure and other types of public capital.**

## Climate change turns the DA – causes economic decline

### **Warming causes econ decline**

#### **Koubi, Vally, et al. 2012**

("Climate variability, economic growth, and civil conflict." *Journal of Peace Research* 49.1 (2012): 113-127. Sage publications , AW)

**The existing literature provides some evidence that climatic changes affect economic output (GDP),** for example by reducing agricultural yields when temperature rises (precipitation falls) (e.g. Mendelsohn et al., 1998; Mendelsohn, Dinar & Williams, 2006; Nordhaus & Boyer, 2000; Tol, 2002; Deschenes & Greenstone, 2007; Barrios, Bertinelli & Strobl, 2010). **Such evidence also suggests that climatic changes should affect economic growth. One can even suspect that the effect on economic growth is more distinct: if climatic changes affected only the level of economic output, we would observe mostly a short-term effect.** This should be the case as for example a rise in temperature (decrease in precipitation) would be compensated by subsequent temperature decreases (precipitation increases) – due, for example, to stringent abatement of emissions – which should then return the GDP to its previous level. **But this is not the case if climatic changes affect economic growth.** The reasons are the following. **First, economic growth will be lower even if GDP returns to its previous level because of forgone consumption and investment due to lower income during the period of higher temperature (lower precipitation).** In addition, as long as countries spend some resources adapting to climatic changes, they incur opportunity costs in terms of not spending these resources on R&D and capital investment. **This has negative effects on economic growth. Moreover, given the short time series used in existing research on the effects of climate on economic conditions, even slightly persistent effects on the level of output will impact on the sample mean of growth. That is, using economic growth rates will also capture the effects on GDP levels.** But using the level of GDP instead of its growth rate may miss the effects on the growth rate. For these reasons we concentrate on the effects of climate variability on economic growth.

### **Climate change intensifies proximate causes of conflict – resource competition**

#### **Koubi, Vally, et al. 2012**

("Climate variability, economic growth, and civil conflict." *Journal of Peace Research* 49.1 (2012): 113-127. Sage publications , AW)

The assessment reports of the Intergovernmental Panel on Climate Change (IPCC, 2001, 2007) and the Stern Review (2007) demonstrate that human activity is contributing in important ways to climatic changes, and that those changes have far-reaching effects on plants, animals, ecosystems, and humanity. **Among the wide range of negative effects, climate change tends to exacerbate the scarcity of important natural resources, such as fresh-water, and it may trigger mass population dislocations (migration) due to extreme weather events, droughts, floods, desertification, and rising sea-levels.** Could these developments increase the risk of violent conflict within and between countries? The IPCC's Third and Fourth Assessment Reports (IPCC, 2001, 2007) as well as a recent study by the German Advisory Council on Global Change (WBGU, 2008) **refer to a possible link between climate change and violent conflict. Furthermore, recent scientific work seems to support such a link** (Devitt & Tol, 2012; Burke et al., 2009; Miguel, Satyanath & Sergenti, 2004). **High-ranking policymakers have also, on many occasions, warned that climate change may contribute to armed conflict.** For instance, UN Secretary-General Ban Ki-moon (2007) has argued that 'The Darfur conflict began as an ecological crisis, arising at least in part from climate change.' President Obama (2009) has stated that 'No nation, however large or

small, wealthy or poor, can escape the impact of climate change. **More frequent drought and crop failures breed hunger and conflict in places where hunger and conflict already thrive.'**

**Steer 13** (Andrew, President and CEO of the World Resources Institute, June 2013, Global Citizen Foundation, "Resource Depletion, Climate Change, and Economic Growth," [http://www.gcf.ch/wp-content/uploads/2013/06/GCF\\_Steer-working-paper-5\\_6.20.13.pdf](http://www.gcf.ch/wp-content/uploads/2013/06/GCF_Steer-working-paper-5_6.20.13.pdf), ND)

**The pace and scale of environmental damage has been well documented. More than one quarter of the world's land surface has been degraded as a result of soil erosion, salinization, nutrient depletion, and desertification (Bai and others 2008). Water withdrawals tripled in the past 50 years, leading to water scarcity and groundwater depletion. In developing countries, withdrawals are projected to increase by another 50 percent by 2030, by which time more than 5 billion people—two-thirds of the world's people—could be living in areas facing moderate to severe water stress (WRI forthcoming). Growth has also strained ecosystems. Roughly 60 percent of the world's ecosystem services are now of lower quality than they were 50 years ago (Millennium Ecosystem Assessment 2005), the current rate of species extinction is 100–1,000 times higher than in prehuman days (IUCN 2004), and all of the planet's 13 hottest years on record have occurred since 1997 (WMO 2013).**<sup>1</sup> The economic cost of such damage is significant. In China, for example, air pollution alone is estimated to cost the equivalent of 3.8 percent of GDP a year (Cropper 2010). Figure 1.1 summarizes the estimated costs of environmental damage across a range of countries. **The bulk of these costs come from pollution and the associated health and productivity costs. Such estimates generally do not place monetary values on more complex issues, such as the loss of biodiversity or the degradation of ecosystem services.** They are also generally based only on current costs, ignoring future and less certain costs, such as the costs of climate change. **The economic cost of such damage is significant. In China, for example, air pollution alone is estimated to cost the equivalent of 3.8 percent of GDP a year (Cropper 2010). Figure 1.1 summarizes the estimated costs of environmental damage across a range of countries. The bulk of these costs come from pollution and the associated health and productivity costs.** Such estimates generally do not place monetary values on more complex issues, such as the loss of biodiversity or the degradation of ecosystem services. **They are also generally based only on current costs, ignoring future and less certain costs, such as the costs of climate change. The costs of environmental damage can have major impacts on economic production.** They include, for example, the impacts on agriculture from the rise in temperature and the increase in the frequency and severity of extreme weather events (not necessarily caused by climate change but made much more likely by it). **For example, the drought in the United States that began in 2012 is expected to cost 1 percent of GDP; it may be the most costly natural disaster in U.S. history. The combination of adverse climate and rapidly growing demand has led to sharply higher food prices over the past few years. The spike in food prices in the second half of 2010 alone was estimated to have driven more than 40 million people into poverty.**<sup>2</sup>

## **AT growth key to solve climate adaptation**

**Climate change impacts traps impoverished people into cycle – no adaptation capacity  
Dercon, 2014**

(Stefan, Policy Research Working Paper6936 “Is Green Growth Good for the Poor?”June 24 2014  
[http://www.wds.worldbank.org/servlet/WDSCContentServer/WDSP/IB/2014/06/24/000158349\\_20140624092056/Rendered/PDF/WPS6936.pdf](http://www.wds.worldbank.org/servlet/WDSCContentServer/WDSP/IB/2014/06/24/000158349_20140624092056/Rendered/PDF/WPS6936.pdf) accessed tm 7/16)

**Although higher incomes and growth could provide a route to economic diversification, investment in more productive or less environmentally damaging capital, and greater resilience in the face of environmental change, those who miss the boat may end up trapped in lower return activities that perpetuate their poverty. Importantly, the economic and sectoral transformation required for rising living standards is likely to be negatively affected.** For example, the negative impacts of climate change on agriculture are likely to affect growth and demand for labor, thereby slowing poverty reduction. Furthermore, **unlike wealthier farmers, the poor may not have the means and capital to make the necessary investments in agriculture to adequately adapt to new circumstances** (including adjusting output patterns to take advantage of likely higher food prices), **trapping them in low productivity agriculture**. Of course, environmental degradation (specifically, climate change) may lead to winners among some of the poor in areas where agricultural opportunities increase or where adaptation investments by richer parts of society provide jobs and higher labor demand.

**X not key to the economy**

## Jobs not key to the economy

### **Productivity key to global economy – jobs don't matter if not productive**

#### **Giles 14**

Chris Giles has been the economics editor of the Financial Times since 2004. He studies national economic trends. "Productivity crisis haunts global economy" - Financial Times, Global Economy January 14, 2014  
<http://www.ft.com/cms/s/0/c0ea2a82-7d18-11e3-a579-00144feabdc0.html#axzz37pz7ugBu>

High quality global journalism requires investment. A productivity crisis is stalking the global economy with most countries failing last year to improve their overall efficiency for the first time in decades. In a sign that innovation might be stalling in the face of weak demand, the Conference Board, a think-tank, said a "dramatic" result of the 2013 figures was a decline in the world's ability to turn labour and capital resources into goods and services. Productivity growth is the most important ingredient for raising prosperity in rich and poor countries alike. If overall productivity growth disappears in the years ahead, it will dash hopes that rich countries can improve their population's living standards and that emerging economies can catch up with the advanced world. The Conference Board said: "This stalling appears to be the result of slowing demand in recent years, which caused a drop in productive use of resources that is possibly related to a combination of market rigidities and stagnating innovation." The failure of overall efficiency – known to economists as total factor productivity – to grow in 2013 results from slower economic growth in emerging economies alongside continued rapid increases in capital used and labour inputs. Labour productivity growth also slowed for the third consecutive year. The decline in total factor productivity continues a trend of recent years in which the remarkable rise in the efficiency of emerging markets has slowed and in advanced economies it has declined. While the measures relate to whole economies, companies at the sharp end of the productivity slowdown have redoubled efforts to improve the situation. The world's biggest miners, including BHP Billiton and Rio Tinto for example, are among those trying to reverse a worrying decline in productivity by moving away from expensive investment in new projects to maximising returns from existing operations. Bart van Ark, chief economist of the Conference Board, said it was not clear whether the decline in productivity growth was the result of weak demand reducing the output of economies, or that the remarkable consumer innovations are not actually improving the efficiency of economic activity. The first idea relates to the "secular stagnation" school of thinking made prominent last year by Lawrence Summers, the former US treasury secretary, while concerns about the usefulness of modern technology in improving productive efficiency have been raised by Prof Robert Gordon, of Northwestern University. "It is probably a bit of both," said Mr van Ark, adding, "the truth is somewhere in the middle." The Conference Board's annual analysis of productivity uses the latest data to estimate economic growth in all countries, the increase in hours worked and the deployment of additional capital to estimate the efficiency of individual economies. Globally, it found that labour productivity growth declined from 1.8 per cent in 2012 to 1.7 per cent in 2013, having been as high as 3.9 per cent in 2010. Total factor productivity dipped 0.1 per cent. For the US it found that productivity gains of the early years of the crisis continued to be elusive in 2013, with labour productivity growth stable at 0.9 per cent in 2013. The US trends were, however, better than those in Europe, which has seen extremely weak productivity growth alongside relatively muted unemployment in most large economies with the exception of Spain, where joblessness soared. Labour productivity grew 0.4 per cent in 2013, having fallen 0.1 per cent in 2012. Mr van Ark said Europe's problem in achieving more efficiency from its labour force stemmed from structural rigidities. "We really see the need for more people to move quickly from one company to another and where [innovative] firms do not see huge risks in taking on these people." Emerging economies saw rates of growth of productivity fall from extraordinarily rapid rates, even though the rate of growth at 3.3 per cent was still much higher than in advanced economies. For China, the Conference Board said that, while "the statistical information for the latest years is sketchy, the indications are that sustained investment growth in China has not been accompanied by the efficiency gains (measured by total factor productivity growth) similar to those of the previous decade". Mr van Ark said he expected productivity growth to pick up in 2014 as demand conditions improved, leading to faster growth of outputs than inputs, but the relatively weak productivity growth outlook to persist

## Green tech not key to the economy

**AT policies to address climate change don't ensure green growth benefits  
impoverished  
Dercon, 2014**

(Stefan, Policy Research Working Paper6936 "Is Green Growth Good for the Poor?" June 24 2014  
[http://www.wds.worldbank.org/servlet/WDSCContentServer/WDSP/IB/2014/06/24/000158349\\_20140624092056/Rendered/PDF/WPS6936.pdf](http://www.wds.worldbank.org/servlet/WDSCContentServer/WDSP/IB/2014/06/24/000158349_20140624092056/Rendered/PDF/WPS6936.pdf) accessed tm 7/16)

To address these issues, various strategies have been discussed to provide a blueprint for 'green' growth, in which the need to protect the environment is internalized while leaving sufficient opportunities for economic growth (OECD 2011). This option appears particularly attractive when viewed from a poverty angle. Importantly, it retains and may even provide further impetus to a growth focus, which is essential for poverty reduction in low - income economies, while contributing to their resilience in the face of environmental problems. Furthermore, because environmental damage is currently not equity neutral, it could help ameliorate the consequences of environmental costs for the poor under current growth trajectories. Much of the discussion on 'green growth' remains relatively vague in terms of specifics, including for poor countries or the poor in general. However, more recent reports (e.g., World Bank 2012) begin to amend this discussion in a careful, nuanced way. Just as not all growth leads to the same degree of poverty reduction or to the same environmental impacts, it is likely that not all efforts to maximize growth given environmental constraints will maximize poverty reduction. The question rarely asked is how various green growth strategies and resilience - enhancing investments interact with poverty. To what extent is green growth good for the poor? Under what conditions can certain green growth strategies lead to unwelcome adverse impacts on the poor or even to 'green poverty'? In this paper, we first provide a stylized discussion of the nature of poverty, particularly its dynamics and interaction with growth. We focus not only on the various assets and capital sources of the poor but also on the sectoral and spatial dimensions of the dynamics of poverty reduction. We then discuss how global and local environmental change affect these dynamics and whether current patterns of change may persist. We introduce a number of stylized examples of 'green' growth initiatives and assess their impact on poverty based on their interaction with the patterns identified earlier in the paper. Finally, we present our conclusions. The perspective that we take is to examine the consequences of possible greener versions of growth processes on poverty reduction. Although growth is important for poverty reduction, our focus is not on the possibility of sufficiently high growth from green growth strategies in developing countries

## **AT ocean and coastal economy key to economy**

### **Interior energy more important than coastal economies**

**Gillespie, June 25 2014** (Patrick Gillespie, "Energy boom fuels economic growth in Midwest states"

Island Packet <http://www.islandpacket.com/2014/06/25/3182034/energy-boom-fuels-economic-growth.html#storylink=cpy> accessed 7/16/14 tm)

**While the national business outlook remains tepid, the energy sector is driving fast economic growth in some states. A drilling boom for oil shale and natural gas has spurred prosperity throughout the middle of the United States. Despite having mostly smaller economies compared with coastal states, these states will continue growing for at least five more years,** energy economists project, **and they'll have a positive impact on American jobs and the trade balance.** "It's a boomtown mentality, something the West hasn't seen for a long time," said Scott Anderson, senior vice president and chief economist at Bank of the West in San Francisco. "You start to think back to the gold rush days in California. You really do see that middle strip of the country outperforming the coasts for a change." **In 2010, East Coast states made up 38 percent of the nation's gross domestic product, the sum of all goods and services produced. Last year, the East Coast produced 36 percent of the American GDP in dollars, while Midwest states increased by 1 percentage point to 14 percent of the national total.** That's according to an analysis by McClatchy of a report published earlier in June by the Bureau of Economic Analysis, part of the Commerce Department. North Dakota's gross domestic product grew 9.7 percent from 2012 to 2013, the most of any state and much higher than the national growth rate over the same period of 1.8 percent, according to the bureau's report.



# **Spending Internal Link Debate – both ways so be careful**

## **\*\*Deficits hurt – private and growth tradeoff**

### **Deficit spending crowds out capital investment—infrastructure cannot offset economic decline**

**Thornton 13**--Vice President and Economic Adviser [Daniel L. Thornton, “Does the Economy Need More Spending Now?”, St. Louis Federal Reserve Bank, Economic Synopses, 2013, No. 24, <http://research.stlouisfed.org/publications/es/article/9892>, accessed 7/19/14]RMT

Assessing the benefits of additional deficit spending is further complicated by the likelihood **that deficit spending reduces economic growth. Additional deficit spending reduces economic growth by crowding out capital investment. A smaller stock of capital means less future output. This is an intergenerational transfer: People today get more output, while those in the future get less. It seems likely that such a loss of future output could easily swamp any (temporary) increase in current output.** Future output gains associated with a larger capital stock accrue over a long period of time, while the **increased output associated with additional deficit spending is short-lived.** <sup>2</sup>Some **economists and policymakers argue** the negative effect on **growth can be offset if the deficit spending is used to improve the infrastructure—roads, bridges, and so forth—because such capital spending increases productivity.** This conjecture is at odds with experience: **Japan has spent massive amounts on infrastructure with no noticeable effect on economic growth, while China is building new cities with few inhabitants. Infrastructure spending can facilitate economic growth, but only when it is driven by economic forces.** However, **the crowding out of productive private capital by additional deficit spending on unproductive public capital will do nothing to stimulate economic growth.** The **previous analysis suggests** why it is difficult to make the case for additional deficit spending. The **positive effect on output is problematic and temporary,** while **the negative effect on economic growth is long-lived.** Hence, **if one believes that the effect of additional deficit spending on output is temporary and potentially capable of reducing economic growth, it is hard to argue for additional deficit spending.** Blinder acknowledges both these points, but nevertheless suggests that additional deficit spending is desirable. Perhaps he really does not believe increased spending has a negative effect on growth. I mention this because in noting that the short-run output is demand-determined, Blinder writes The big question is how much of the economy’s productive capacity is used. **And that depends on the strength of demand—the willingness of businesses, consumers, foreign customers, and governments to buy what American businesses are able to produce. When demand falls short of supply, deficit reduction hampers economic growth by reducing demand even further.**

### **Deficit spending increases capital inflows and reduces domestic investment**

**Huntley 14**--Congressional Budget Office [Jonathan Huntley “The Long-Run Effects of Federal Budget Deficits on National Saving and Private Domestic Investment”, February 2014 [http://www.cbo.gov/sites/default/files/cbofiles/attachments/45140-NSPDI\\_workingPaper.pdf](http://www.cbo.gov/sites/default/files/cbofiles/attachments/45140-NSPDI_workingPaper.pdf) accessed 7/19/14]RMT

**Large estimate of the effect of deficits on investment.** Each **additional dollar of deficit leads to a 50 cent decline in domestic investment.** In particular, **every additional dollar of deficit is projected to increase private saving by 29 cents and reduce national saving by 71 cents, and every dollar’s decline in national saving is projected to lead to a 29 cent increase in the amount of foreign capital invested in the United States.** Together, **those estimates imply that a dollar’s increase in the budget federal deficit**

results in a 29 cent increase in private saving, a 21 cent increase in net capital inflows (that is, 71 cents times 0.29), and a 50 cent decline in domestic investment.

### **Long term deficits drag economy down**

**Pianin, July 16 2014** (Eric The Fiscal Times,

<http://www.thefiscaltimes.com/Articles/2014/07/16/CBO-Warns-Unchecked-Entitlement-Spending-Unsustainable> accessed tm 7/18)

Congress last December agreed to a two-year budget deal that removed from the table any serious discussion of entitlement and tax reform until well after the November elections. Liberal groups maintain that the deficit has been tamed and won't be a problem for years. They insist government should worry more about investing in jobs and economic growth than scaling back Social Security and other entitlement programs.

However, the CBO spelled out a series of adverse effects of allowing the debt to soar in the long term. Among them:

“The large amount of federal borrowing would draw money away from private investment in productive capital in the long term, because the portion of people’s savings used to buy government securities would not be available to finance private investment. The result would be a smaller stock of capital and lower output and income than would otherwise be the case, all else being equal,” the report said.

Federal spending on interest payments would rise, “requiring higher taxes, lower spending for benefits and services, or both to achieve any chosen targets for budget deficits and debt.

### **Deficit spending hurts economy – private investment tradeoff**

**Thornton 13**--Vice President and Economic Adviser [Daniel L. Thornton, “Does the Economy Need More Spending Now?”, St. Louis Federal Reserve Bank, Economic Synopses, 2013, No. 24, <http://research.stlouisfed.org/publications/es/article/9892>, accessed 7/19/14]RMT

Additional deficit spending need not increase output for two reasons. First, increased deficit spending increases the supply of bonds, which reduces bond prices and increases real bond yields. Higher real bond yields reduce consumption and investment spending. Consequently, additional deficit spending can crowd out private spending, so the net increase in demand would be less than the increase in the deficit. Second, deficit spending may not affect private spending because of Ricardian equivalence, named after the classical economist, David Ricardo. The basic premise is that current tax cuts must be paid for with future tax increases in order to repay the additional debt incurred today. Consequently, people save the additional income arising from the tax cut rather than spending it. Thus, there is no change in household spending in response to the current tax cut. For either of these reasons, the response of total output to the increased deficit will be zero or very small. In addition to concerns about the extent to which deficit spending crowds out private spending is the fact that any increase in output is temporary: Increased deficit spending can have no permanent effect on output. In short, government debt cannot be considered net wealth by all U.S. households. If it could be, then we could all become infinitely wealthy simply by incurring an infinite amount of debt. Just as with fiat money, you cannot simply print your way to long-run prosperity.

## **Public debt hurts economic growth**

### **Public debt is directly correlated to reduced economic growth**

Panizza and Presbitero (Ugo Panizza, professor of International Economics and Pictet Chair in Finance and Development at the Graduate Institute of International and Development Studies in Geneva, Andrea F. Presbitero, Economist, International Monetary Fund) '12

["Public Debt and Economic Growth: Is There a Causal Effect?", Ugo Panizza & Andres F. Presbitero, 10/17/12]

Do high levels of public debt reduce economic growth? This is an important policy question. A positive answer would imply that, even if effective in the short-run, expansionary fiscal policies that increase the level of debt may reduce long-run growth, and thus partly (or fully) negate the positive effects of the fiscal stimulus.<sup>¶</sup> Most policymakers do seem to think that high public debt reduces long-run economic growth.<sup>1</sup> This view is in line with a growing empirical literature which shows that there is a negative correlation between public debt and economic growth in advanced and emerging market economies, and finds that this correlation becomes particularly strong when public debt approaches 100 percent of GDP (Reinhart and Rogoff, 2009, 2010a,b; Reinhart, Reinhart and Rogoff, 2012; Kumar and Woo, 2010; Cecchetti, Mohanty and Zampolli, 2011; Checherita-Westphal and Rother, 2012; Furceri and Zdzienicka, 2012).<sup>2¶</sup> Correlation, however, does not necessarily imply causation. The link between public debt and economic growth could be driven by the fact that it is low economic growth that leads to high levels of debt (Reinhart, Reinhart and Rogoff, 2012). Empirically, measuring debt as a ratio to GDP automatically creates a negative correlation between debt and growth and this negative correlation can be amplified by the presence of automatic stabilizers or by discretionary countercyclical fiscal policy. Alternatively, the observed correlation between debt and growth could be due to a third factor that has a joint effect on these two variables (for instance, a banking crisis could jointly cause a growth slowdown and a sudden debt explosion (Reinhart and Rogoff, 2011)). Establishing the presence of a causal link going from debt to growth requires finding an instrumental variable that has a direct effect on debt but no direct (or indirect, except for the one going through debt) effect on economic growth. In this paper, we propose a new instrument for public debt and show that instrumental variable regressions do not provide evidence that public debt causes growth in a sample of OECD countries. Our instrumental variables strategy relies on the fact that, in the presence of foreign currency debt, changes in a country's exchange rate have a direct and mechanical effect on the debt-to-GDP ratio. We thus collect detailed data on the currency composition of public debt and match them with data on bilateral exchange rates to build a variable that captures valuation effects brought about by exchange rate movements.

## **Internal link defense - government spending doesn't help the economy**

### **Government spending historically fails – stimulus proves**

**Riedl 10**--Chief Analyst Heritage Foundation [Brian M, "Why Government Spending Does Not Stimulate Economic Growth: Answering the Critics" January 5, 2010 <http://www.heritage.org/research/reports/2010/01/why-government-spending-does-not-stimulate-economic-growth-answering-the-critics> accessed 7/19/14]RMT

Indeed, President **Obama's stimulus bill failed by its own standards**. In a January 2009 report, **White House economists predicted that the stimulus bill would create** (not merely save) **3.3 million net jobs by 2010**. Since then, **3.5 million more net jobs have been lost, pushing the unemployment rate above 10 percent**. [1] The fact that government failed to spend its way to prosperity is not an isolated incident: During the 1930s, **New Deal lawmakers doubled federal spending--yet unemployment remained above 20 percent until World War II. Japan responded to a 1990 recession by passing 10 stimulus spending bills over 8 years (building the largest national debt in the industrialized world)--yet its economy remained stagnant**. In 2001, President Bush responded to a recession by "injecting" tax rebates into the economy. The economy did not respond until two years later, when tax rate reductions were implemented. **In 2008, President Bush tried to head off the current recession with another round of tax rebates**. The **recession continued to worsen**. Now, **the most recent \$787 billion stimulus bill was intended to keep the unemployment rate from exceeding 8 percent**. In November, **it topped 10 percent**. [2] **Undeterred by these repeated stimulus failures, President Obama is calling for yet another stimulus bill**. [3] **There is every reason to expect another round to fail as miserably as the past ones, and it would bury the nation deeper in debt**.

### **Deficit spending doesn't stimulate the economy – no discernable activity result from spending**

**Riedl 10**--Chief Analyst Heritage Foundation [Brian M, "Why Government Spending Does Not Stimulate Economic Growth: Answering the Critics" January 5, 2010 <http://www.heritage.org/research/reports/2010/01/why-government-spending-does-not-stimulate-economic-growth-answering-the-critics> accessed 7/19/14]RMT

**Economic data contradict Keynesian stimulus theory. If deficits represented "new dollars" in the economy, the record \$1.2 trillion in FY 2009 deficit spending that began in October 2008--well before the stimulus added \$200 billion more**[5]--would have already overheated the economy. Yet **despite the historic 7 percent increase in GDP deficit spending over the previous year, the economy shrank by 2.3 percent in FY 2009**. [6] **To argue that deficits represent new money injected into the economy is to argue that the economy would have contracted by 9.3 percent without this "infusion" of added deficit spending** (or even more, given the Keynesian multiplier effect that was supposed to further boost the impact). **That is simply not plausible, and few if any economists have claimed otherwise**. And **if the original \$1.2 trillion in deficit spending failed to slow the economy's slide, there was no reason to believe that adding \$200 billion more in 2009 deficit spending from the stimulus bill would suddenly do the trick**. **Proponents of yet another stimulus should answer the following questions: (1) If nearly \$1.4 trillion budget deficits are not enough stimulus, how much is enough? (2) If Keynesian stimulus**

repeatedly fails, why still rely on the theory? This is no longer a theoretical exercise. The idea that increased deficit spending can cure recessions has been tested repeatedly, and it has failed repeatedly. The economic models that assert that every \$1 of deficit spending grows the economy by \$1.50 cannot explain why \$1.4 trillion in deficit spending did not create a \$2.1 trillion explosion of new economic activity.

## **\*\*Deficit spending helps the economy – laundry list**

### **Deficit spending good- gets us out of the recession**

#### **Krugman '13**

PAUL KRUGMAN- March 10, 2013 "Dwindling Deficit Disorder" NY Times, PHD at MIT, Nobel Prize winner, American economist, Professor of Economics and International Affairs at the Woodrow Wilson School of Public and International Affairs at Princeton University [http://www.nytimes.com/2013/03/11/opinion/krugman-dwindling-deficit-disorder.html?\\_r=1&AA](http://www.nytimes.com/2013/03/11/opinion/krugman-dwindling-deficit-disorder.html?_r=1&AA)

For three years and more, policy debate in Washington has been dominated by warnings about the dangers of budget deficits. A few lonely economists have tried from the beginning to point out that this fixation is all wrong, that **deficit spending is actually appropriate in a depressed economy**. But even though the deficit scolds have been wrong about everything so far — where are the soaring interest rates we were promised? — protests that we are having the wrong conversation have consistently fallen on deaf ears. What's really remarkable at this point, however, is the persistence of the deficit fixation in the face of rapidly changing facts. People still talk as if the deficit were exploding, as if the United States budget were on an unsustainable path; in fact, **the deficit is falling more rapidly than it has for generations, it is already down to sustainable levels, and it is too small given the state of the economy**. Start with the raw numbers. **America's budget deficit soared after the 2008 financial crisis and the recession that went with it, as revenue plunged and spending on unemployment benefits and other safety-net programs rose. And this rise in the deficit was a good thing! Federal spending helped sustain the economy at a time when the private sector was in panicked retreat;** arguably, the **stabilizing role of a large government was the main reason the Great Recession didn't turn into a full replay of the Great Depression**. But after peaking in 2009 at \$1.4 trillion, the deficit began coming down. The Congressional Budget Office expects the deficit for fiscal 2013 (which began in October and is almost half over) to be \$845 billion. That may still sound like a big number, but given the state of the economy it really isn't. **Bear in mind that the budget doesn't have to be balanced to put us on a fiscally sustainable path; all we need is a deficit small enough that debt grows more slowly than the economy.** To take the classic example, America never did pay off the debt from World War II — in fact, our debt doubled in the 30 years that followed the war. But debt as a percentage of G.D.P. fell by three-quarters over the same period. Right now, a sustainable deficit would be around \$460 billion. The actual deficit is bigger than that. But according to new estimates by the budget office, half of our current deficit reflects the effects of a still-depressed economy. The "cyclically adjusted" deficit — **what the deficit would be if we were near full employment — is only about \$423 billion, which puts it in the sustainable range; next year the budget office expects that number to fall to just \$172 billion.** And that's why budget office projections show the nation's debt position more or less stable over the next decade. **So we do not, repeat do not, face any kind of deficit crisis either now or for years to come.** There are, of course, longer-term fiscal issues: rising health costs and an aging population will put the budget under growing pressure over the course of the 2020s. But I have yet to see any coherent explanation of why these longer-run concerns should determine budget policy right now. **And as I said, given the needs of the economy, the deficit is currently too small.** Put it this way: Smart fiscal policy involves having the government spend when the private sector won't, supporting the economy when it is weak and reducing debt only when it is strong. Yet the cyclically adjusted deficit as a share of G.D.P. is currently about what it was in 2006, at the height of the housing boom — and it is headed down. Yes, we'll want to reduce deficits once the economy recovers, and there are gratifying signs that a solid recovery is

finally under way. But unemployment, especially long-term unemployment, is still unacceptably high. **"The boom, not the slump, is the time for austerity,"** John Maynard Keynes declared many years ago. He was right — **all you have to do is look at Europe to see the disastrous effects of austerity on weak economies.** And this is still nothing like a boom. Now, I'm aware that the facts about our dwindling deficit are unwelcome in many quarters. Fiscal fearmongering is a major industry inside the Beltway, especially among those looking for excuses to do what they really want, namely dismantle Medicare, Medicaid and Social Security. **People whose careers are heavily invested in the deficit-sold industry don't want to let evidence undermine their scare tactics;** as the deficit dwindles, we're sure to encounter a blizzard of bogus numbers purporting to show that we're still in some kind of fiscal crisis. But we aren't. **The deficit is indeed dwindling, and the case for making the deficit a central policy concern, which was never very strong given low borrowing costs and high unemployment, has now completely vanished.**

## **Deficit spending solves job growth and a quick economic recovery – status quo is slow GDP growth which won't do anything**

**Papdimitriou 13** (Dimitri, president of the Levy Economics Institute of Bard College and executive vice president of Bard, president of the Levy Economics Institute of Bard College and executive vice president of Bard, 4/9/2013, Deseret News, "What the economy needs is even more deficit spending," <http://www.deseretnews.com/article/765626414/What-the-economy-needs-is-even-more-deficit-spending.html?pg=all>, ND)

Despite prevailing notions in the capital and throughout the nation, those of us at the Levy Economics Institute — along with **many** other **analysts and economists — have concluded that the deficit should be increased. Why add to the deficit right now? Jobs. Our economic models clearly show that without increased government outlays we'll be unable to generate enough GDP growth to seriously attack unemployment.** If we tried to balance the budget through tax hikes, our still-recovering economy would be hurt. That leaves a temporarily bigger deficit as an important option. A mutation in the link between growth and jobs makes the issue urgent. **While we are seeing some economic growth, the unemployment rate is not responding as strongly to the gains as it did in the past. This slow job growth — today's "jobless recovery" — isn't an outlier. It's a phenomenon that has been increasing over the last three decades, with jobs coming back more and more slowly after a downturn, even when GDP is increasing.** The weak employment response has been an almost straight-line trend for more than 30 years. Our institute's newest econometric models show that each 1 percent boost in the GDP today will create, roughly, only a third as much improvement to the unemployment rate as the same 1 percent rise did in the late 1970s. **Traditionally, we've assumed that GDP growth would be followed by an employment surge. The break in that link is now very clear. It's especially worrisome this year, with only a small GDP rise universally anticipated.** The Federal Reserve, for one, just reduced its growth outlook to 2.8 percent at most for 2013. The shallow recovery we're seeing may indeed continue through 2014 and beyond. **Since employment now consistently lags well behind GDP, we'll have a long slog before we reach pre-crisis unemployment levels** (below 4.6 percent). **Some Federal Reserve officials believe it might take three years just to get from today's 7.6 percent down to 6.5 percent.** Full employment would still be nowhere in sight. The quantitative data are telling us that without a stimulus, we can't expect a strong employment lift. But instead of stimulus, we're devising federal budgets that cut spending and lay off workers. **The sequester is expected to depress GDP growth by perhaps half a percentage point — when we know that more growth than ever will be needed to raise employment — and cost anywhere from 700,000 to more than 1 million jobs. Slower government spending is one reason that post-recession growth has been below par compared with other recoveries,** Fed Vice Chair Janet Yellen has argued. **As government outlays and employment have shrunk, the contribution of public funds to national growth has also fallen. By our estimates, that contribution now stands at about zero. That's another data point indicating that federal deficits need to be increased.** To better understand the changing relationship between growth and jobs, the Levy Institute recently looked at three scenarios through 2016: what the results might be of a small,



medium or large stimulus. **A strong stimulus was clearly the most effective option, since it had a powerful, positive influence on employment growth and, in the long term, on deficit reduction.** Of course, that route is completely unfeasible in the current political climate. But **we saw that even a small amount of deficit spending could help put the recovery on track if it were combined with a mix of private investment, increased exports and good policy alternatives.** That points toward a way forward. **Increasing the deficit while our economy is fragile is not "pro deficit," any more than a family with a 30-year home mortgage is "pro debt."** **To reclaim a phrase that deficit hawks have tried to make their own, it is "sensible and serious."** **The federal government can run a deficit, as it almost always has, to help the nation return to prosperity. With our new understanding of the fraying tie between GDP growth and jobs, we know that millions of Americans are on course for an agonizingly slow march out of joblessness unless we make a move.** The nature of slumps and recoveries has changed, and the policies to manage them need to change too.

**Impact Debate Growth Good/Economic  
decline causes war**

## **Impacts**

## Economic growth solves war – laundry list

### **Economic decline causes war – multiple studies prove**

**Royal, 2010**, in *Economics of War and Peace: Economic, Legal and Political Perspectives* eds. Goldsmith and Brauer, [Director Cooperative Threat Reduction DOD, Jedediah], p. 213-215

Less intuitive is how periods of **economic decline may increase the likelihood of external conflict**. Political science literature has contributed a moderate degree of attention to the impact of economic decline and the security and defence behavior of interdependent states. Research in this vein has been considered at systemic, dyadic and national levels. Several notable contributions follow.

First, on the systemic level, **Pollins (2008) advances Modelski and Thompson's (1996) work** on leadership cycle theory, **finding that rhythms in the global economy are associated with the rise and fall of a pre-eminent power and the often bloody transition from one pre-eminent leader to the next**. As such, **exogenous shocks such as economic crises** could usher in a redistribution of relative power (see also Gilpin, 1981) that **leads to uncertainty about power balances, increasing the risk of miscalculation** (Fearon, 1995). Alternatively, even a relatively certain redistribution of power could lead to a permissive environment for conflict as a rising power may seek to challenge a declining power (Werner, 1999). Separately, Pollins (1996) also shows that global economic cycles combined with parallel leadership cycles impact the likelihood of conflict among major, medium and small powers, although he suggests that the causes and connections between global economic conditions and security conditions remain unknown. Second, on a dyadic level, **Copeland's (1996, 2000) theory of trade**

**expectations suggests** that 'future expectations of trade' is a significant variable in understanding economic conditions and security behavior of states. He argues that interdependent states are likely to gain pacific benefits from trade so long as they have an optimistic view of future trade relations. However, **if the expectations of future trade decline**, particularly for difficult to replace items such as energy resources, **the likelihood for conflict increases**, as states will be inclined to use force to gain access to those resources. Crises could potentially be the trigger for decreased trade expectations either on its own or because it triggers protectionist moves by interdependent states. Third, others have considered the link between economic decline and external armed conflict at a national level.

**Blomberg and Hess (2002) find a strong correlation between internal conflict and external conflict, particularly during periods of economic downturn**. They write, the linkages between internal and external conflict and prosperity are strong and mutually reinforcing. Economic conflict tends to spawn internal conflict, which in turn returns the favor. Moreover, the presence of a recession tends to amplify the extent to which international and external conflicts self-reinforce each other. (Blomberg & Hess, 2002, p. 89) **Economic decline has also been linked with an increase in the likelihood of terrorism**

(Blomberg, Hess, & Weerapana, 2004), **which has the capacity to spill across borders and lead to external tensions**. Furthermore, crises generally reduce the popularity of a sitting government. **'Diversionary theory' suggests that, when facing unpopularity arising from economic decline, sitting governments have increased incentives to fabricate external military conflicts to create a 'rally around the flag' effect**. Wang (1996), DeRouen (1995), and Blomberg, Hess, and Thacker (2006) **find supporting evidence showing that economic decline and use of force are at least indirectly correlated**. Gelpi (1997), Miller (1999), and Kisangani and Pickering (2009) suggest that the tendency towards diversionary tactics are greater for democratic states than autocratic states, due to the fact that democratic leaders are generally more susceptible to being removed from office due to lack of domestic support. DeRouen (2000) has provided evidence showing that periods of weak economic performance in the United States, and thus weak Presidential popularity, are statistically linked to an increase in the use of force. In summary, **recent economic scholarship positively correlates economic integration with an increase in the frequency of economic crises, whereas political science scholarship links economic decline with external conflict at systemic, dyadic and national levels**. This implied connection

## Economic decline breeds incentives for conflict – history proves

Walter Russell **Mead**, the Henry A. Kissinger Senior Fellow in U.S. Foreign Policy at the Council on Foreign Relations, February 4, 20**09**, "Only Makes You Stronger," The New Republic

History may suggest that financial crises actually help capitalist great powers maintain their leads--but it has other, less reassuring messages as well. If financial crises have been a normal part of life during the 300-year rise of the liberal capitalist system under the Anglophone powers, so has war. The wars of the League of Augsburg and the Spanish Succession; the Seven Years War; the American Revolution; the Napoleonic Wars; the two World Wars; the cold war: The list of wars is almost as long as the list of financial crises. **Bad economic times can breed wars. Europe was a pretty peaceful place in 1928, but the Depression poisoned German public opinion and helped bring Adolf Hitler to power. If the current crisis turns into a depression, what rough beasts might start slouching toward Moscow, Karachi, Beijing or New Delhi to be born? The United States may not, yet, decline, but, if we can't get the world back on track, we may still have to fight.**

## Economic collapse restructuring of international relations intensifies proximate causes of conflicts

### Merlini, Senior Fellow – Brookings, 11

[Cesare Merlini, nonresident senior fellow at the Center on the United States and Europe and chairman of the Board of Trustees of the Italian Institute for International Affairs (IAI) in Rome. He served as IAI president from 1979 to 2001. Until 2009, he also occupied the position of executive vice chairman of the Council for the United States and Italy, which he co-founded in 1983. His areas of expertise include transatlantic relations, European integration and nuclear non-proliferation, with particular focus on nuclear science and technology. A Post-Secular World? DOI: 10.1080/00396338.2011.571015 Article Requests: Order Reprints : Request Permissions Published in: journal Survival, Volume 53, Issue 2 April 2011 , pages 117 - 130 Publication Frequency: 6 issues per year Download PDF Download PDF (~357 KB) View Related Articles To cite this Article: Merlini, Cesare 'A Post-Secular World?', Survival, 53:2, 117 – 130]

Two neatly opposed scenarios for the future of the world order illustrate the range of possibilities, albeit at the risk of oversimplification. **The first scenario entails the premature crumbling of the post-Westphalian system. One or more of the acute tensions apparent today evolves into an open and traditional conflict between states, perhaps even involving the use of nuclear weapons. The crisis might be triggered by a collapse of the global economic and financial system, the vulnerability of which we have just experienced and the prospect of a second Great Depression, with consequences for peace and democracy similar to those of the first. Whatever the trigger, the unlimited exercise of national sovereignty, exclusive self-interest and rejection of outside interference would likely be amplified, emptying perhaps entirely the half-full glass of multilateralism including the UN and the European Union.** Many of the more likely conflicts, such as between Israel and Iran or India and Pakistan, have potential religious dimensions. Short of war, tensions such as those related to immigration might become unbearable. Familiar issues of creed and identity could be exacerbated. One way or another, the secular rational approach would be sidestepped by a return to theocratic absolutes, competing or converging with secular absolutes such as unbridled nationalism.

## Economic recessions increase risk of civil conflict

### Bloomberg and Hess, Wellesley and Oberlin economics professors, 2002

(S. Brock and Gregory D., "The Temporal Links between Conflict and Economic Activity", Journal of Conflict Resolution, Volume 46, Number 1)

**Using an unbalanced panel of 152 countries from 1950 to 1992, we estimate a Markov probability model to investigate the joint determination of internal conflict, external conflict, and the economy.** We begin with a simple model that allows for a two-variable relationship: internal conflict and recessions, external conflict and recessions, and internal conflict and external conflict. We find that these are not independent events. **In particular, we find that recessions play an important role in determining internal conflict, especially in Africa and for nondemocratic countries. In this case, the occurrence of a recession causes an increase in the probability of internal conflict starting in a given year to almost**

double. We then extend the model to allow for a three-variable relationship: internal conflict, external conflict, and recessions. In the more complicated system, we continue to find an important link. In this case, we **find that the presence of a recession coupled with an external war will actually cause the probability of an internal conflict starting in a given year to increase between two- and threefold. If this study is to convince readers and policy makers of anything, it is that the linkages between internal and external conflict and prosperity are strong and mutually reinforcing. Economic conflict tends to spawn internal conflict, which in turn returns the favor. Moreover, the presence of a recession tends to amplify the extent to which internal and external conflicts self-reinforce each other**. However, the ability of government organizations to stop the spread of internal conflict to external conflict and vice versa by helping to reduce the incidence of recessions may be quite limited. Economic aid that is to improve a nation's productive capacity is likely to be difficult to identify and implement in just such circumstances.

## Economic Decline causes China war

### **US Economic failure kills SQ check on Chinese miscalc**

**Glaser 5/2/12** “China is Reacting to Our Weak Economy” Bonnie S. Glaser (senior fellow at the Center for Strategic and International Studies.) 5/2/2012 <http://www.nytimes.com/roomfordebate/2012/05/02/are-we-headed-for-a-cold-war-with-china/china-is-reacting-to-our-weak-economy>

**To maintain peace and stability in the Asia-Pacific region** and secure American interests, **the United States must sustain its leadership and bolster regional confidence in its staying power. The key** to those goals **is**

reinvigorating **the U.S. economy**. Historically, the Chinese have taken advantage of perceived American weakness and shifts in the global balance of power. In 1974 China seized the Paracel Islands from Saigon just after the United States and the Socialist Republic of Vietnam signed the Paris Peace Treaty, which signaled the U.S. withdrawal from the region. When the Soviet leader Mikhail Gorbachev met one of Deng Xiaoping’s “three obstacles” requirements for better ties and withdrew from Can Ranh Bay, Vietnam, in 1988, China snatched seven of the Spratly Islands from Hanoi. Two decades later, as the United States-Philippines base agreement was terminated, China grabbed Mischief Reef from Manila. Beijing must not be allowed to conclude that an economic downturn means our ability to guarantee regional stability has

weakened. **The Chinese assertive behaviors** against its neighbors in recent years in the East China Sea, the South China Sea and the

Yellow Sea **were** in part **a consequence of** China’s assessment that the global financial crisis signaled **the beginning of U.S.**

**decline** and a shift in the balance of power in China’s favor. **The Obama administration’s “rebalancing” or “pivot” to Asia will help prevent Chinese miscalculation** and increase the confidence of U.S. partners in U.S. reliability as the ballast for peace

and stability in the region. **But failure to follow through with actions and resources would spark uncertainty**

and lead smaller countries to accommodate Chinese interests in the region. Most important, **the United States must revive its**

**economy**. China will inevitably overtake the United States as the largest economy in the world in the coming decade or two. **The United**

**States must not let Beijing conclude that a relative decline in U.S. power means a weakened United**

**States unable to guarantee regional peace and stability. The Chinese see the United States as mired in**

**financial disorder**, with an alarming budget deficit, high unemployment and slow economic growth — **which**, they predict, **will lead**

**to America's demise as the sole global superpower. To avoid Chinese miscalculation and greater**

**United States-China strategic competition, the United States needs to restore financial solvency** and growth through bipartisan action.

### **China rise exacerbates regional insecurities, if US sucked in means nuke war.**

**Lieven 6/12/2012** “Avoiding a US-China War” Anatol Lieven (Former associate at Carnegie Endowment for International Peace, editor at International Institute for Strategies, author of numerous books on foreign policy, doctorate in Political science, Senior Research Fellow for New America Foundation) 6/12/2012 [http://www.nytimes.com/2012/06/13/opinion/avoiding-a-us-china-war.html?\\_r=2](http://www.nytimes.com/2012/06/13/opinion/avoiding-a-us-china-war.html?_r=2)

This month, Defense Secretary Leon Panetta announced that by **2020, 60 percent of the U.S. Navy will be deployed in the Pacific**. Last November, in Australia, President Obama announced the establishment of a U.S. military base in that country, and threw

down an ideological gauntlet to China with his statement that the United States will “continue to speak candidly to Beijing about the importance of upholding international norms and respecting the universal human rights of the Chinese people.” The dangers inherent in present developments in American, Chinese and regional policies are set out in “The China Choice: Why America Should Share Power,” an

important forthcoming book by the Australian international affairs expert Hugh White. As he writes, **“Washington and Beijing are**

**already sliding toward rivalry by default.”** To escape this, White makes a strong argument for a “concert of powers” in Asia, as

the best — and perhaps only — way that this looming confrontation can be avoided. The economic basis of such a U.S.-China agreement is indeed already in place. The danger of conflict does not stem from a Chinese desire for global leadership. Outside East Asia, Beijing is sticking to a very cautious policy, centered on commercial advantage without military components, in part because Chinese leaders realize that it would take decades and colossal naval expenditure to allow them to mount a global challenge to the United States, and that even then they would almost certainly fail. In East Asia, things are very different. For most of its history, China has dominated the region. When it becomes the largest economy on earth, it will certainly seek to do so. While China cannot build up naval forces to challenge the United States in distant oceans, it would be very surprising if in future it will not be able to generate missile and air forces sufficient to deny the U.S. Navy access to the seas

around China. Moreover, **China is engaged in territorial disputes with other states in the region over island**

**groups — disputes in which Chinese popular nationalist sentiments have become heavily engaged.** With

communism dead, **the Chinese administration has relied** very heavily — and successfully — **on nationalism** as an ideological support for its rule. The problem is that if clashes erupt over these islands, Beijing may find itself in a position where it cannot compromise without severe damage to its domestic legitimacy — very much the position of the European great powers in 1914. In these disputes, Chinese nationalism collides with other nationalisms — particularly that of Vietnam, which embodies strong historical resentments. The hostility to China of Vietnam and most of the other regional states is at once America's greatest asset and greatest danger. It means that **most of China's neighbors want the United States to remain militarily present** in the region. As White argues, even if the United States were to withdraw, it is highly unlikely that these countries would submit meekly to Chinese hegemony. But **if the United States were to commit itself to a military alliance with these countries against China, Washington would risk embroiling America in their territorial disputes.** In the event **of a military clash between Vietnam and China,** Washington would be faced with **the choice of** either holding aloof and seeing its credibility as an ally destroyed, or **fighting China.** Neither the **United States nor China would "win"** the resulting war outright, **but they would certainly inflict catastrophic damage on each other and on the world economy. If the conflict escalated into a nuclear exchange, modern civilization would be wrecked. Even a prolonged period of military and strategic rivalry with an economically mighty China will gravely weaken America's global position.** Indeed, U.S. overstretch is already apparent — for example in Washington's neglect of the crumbling states of Central America. To avoid this, White's suggested East Asian order would establish red lines that the United States and China would both agree not to cross — most notably a guarantee not to use force without the other's permission, or in clear self-defense. Most sensitively of all, while China would have to renounce the use of force against Taiwan, Washington would most probably have to publicly commit itself to the reunification of Taiwan with China. Equally important, China would have to acknowledge the legitimacy of the U.S. presence in East Asia, since this is desired by other East Asian states, and the United States would have to acknowledge the legitimacy of China's existing political order, since it has brought economic breakthrough and greatly enhanced real freedoms to the people of China. Under such a concert, U.S. statements like those of President Obama in support of China's democratization would have to be jettisoned. As White argues, such a concert of power between the United States, China and regional states would be so difficult to arrange that "it would hardly be worth considering if the alternatives were not so bad." But as his book brings out with chilling force, the alternatives may well be catastrophic.

## **Economic growth is key to prevent U.S-China Conflict**

**HSU 11**—["Economic Ties Could Help Prevent US-China War" Jeremy Hsu, Innovation NewsDaily Senior Writer; 01 November 2011 05:32 PM ET;

<http://www.innovationnewsdaily.com/660-china-military-cyber-national-security.html>]

As the U.S. faces China's economic and military rise, it also holds a dwindling hand of cards to play in the unlikely case of open conflict. Cyberattacks aimed at computer networks, targeted disabling of satellites or economic warfare could end up bringing down both of the frenemies. That means ensuring the U.S. economy remains strong and well-balanced, with China's economy possibly representing the best deterrent, according to a new report. The Rand Corporation's analysts put low odds on a China-U.S. military conflict taking place, but still lay out danger scenarios where the U.S. and China face greater risks of stumbling into an unwanted war with one another. They point to the economic codependence of both countries as the best bet against open conflict, similar to how nuclear weapons ensured mutually assured destruction for the U.S. and Soviet Union during the Cold War. War Militaria Collectors www.JCAmericana.com We Buy War Artifacts & Militaria Free Appraisals for Authenticity Learn German in 10 Days Pimsleur Approach.com/Learn-German World-famous Pimsleur Method. As seen on PBS - \$9.95 w/ Free S&H. VA Home Loan for Veterans www.VAMortgageCenter.com Get a Quote in 2 Minutes! VA Loans now Up to \$729,000 with \$0 Down. Ads by Google "It is often said that a strong economy is the basis of a strong defense," the Rand report says. "In the case of China, a strong U.S. economy is not just the basis for a strong defense, it is itself perhaps the best defense against an adventurous China." Such "mutually assured economic destruction" would devastate both the U.S. and China, given how



China represents America's main creditor and manufacturer. The economic fallout could lead to a global recession worse than that caused by the financial crisis of 2008-2009. The U.S. still spends more than five times on defense compared with China, but Rand analysts suggest that China's defense budget could outstrip that of the U.S. within the next 20 years. The U.S. Air Force and Navy's current edge in the Pacific has also begun to shrink as China develops aircraft, ships, submarines and missiles capable of striking farther out from its coast. Existing U.S. advantages in cyberwar and anti-satellite capabilities also don't offset the fact that the U.S. military depends far more heavily on computer networks and satellites than China's military. That makes a full-out cyberwar or satellite attacks too risky for the U.S., but perhaps also for China. "There are no lives lost — just extensive harm, heightened antagonism, and loss of confidence in network security," Rand analysts say. "There would be no 'winner.'" Open military conflict between China and the U.S. could also have "historically unparalleled" economic consequences even if neither country actively engages in economic warfare, Rand analysts say. The U.S. could both boost direct defense in the unlikely case of war and reduce the risk of escalation by strengthening China's neighbors. Such neighbors, including India, South Korea, Japan and Taiwan, also represent possible flashpoints for China-U.S. conflict in the scenarios laid out by the Rand report. Other possible danger zones include the South China Sea, where China and many neighboring countries have disputes over territorial claims, as well as in the murkier realm of cyberspace. Understandably, China has shown fears of being encircled by semi-hostile U.S. allies. That's why Rand analysts urged the U.S. to make China a partner rather than rival for maintaining international security. They also pointed out, encouragingly, that China has mostly taken "cautious and pragmatic" policies as an emerging world power. "As China becomes a true peer competitor, it also becomes potentially a stronger partner in the defense as well as economic field," the Rand analysts say.

## **Economic declines causes war – laundry list**

### **Economic sluggishness increases the chance of armed conflict**

**Bergolt and Lujala 12** (Bergolt and Lugala. Climate-related Natural Disasters, Economic Growth, and Armed Civil Conflict. Vol. 1. Oslo: Peace Institute of Oslo, 2012. Print. Fred).

Research indicates that economic growth is related to the occurrence of armed conflict. If sudden changes in economic growth increase the risk of armed conflict and weather-related disasters cause negative growth shocks, a logical consequence would be that such disasters can cause armed conflict via their negative impact on growth. Several empirical studies document that slow economic growth and low income levels are important in predicting which countries will experience a conflict: armed civil conflict is more likely to occur in poor countries than in rich (see, among others, Collier & Hoeffler, 2004; Fearon & Laitin, 2003; Hegre & Sambanis, 2006). This can be the result of frustration and grievances, ease of recruiting rebels when even modest compensations to the rebel and his/her family exceed their present income, and lack of military capabilities and state capacity to prevent and suppress armed conflicts.

### **Economic decline increases the probability of conflict**

**Kreitner 11** (Kreitner, Ricky. "Serious People Are Starting To Realize That We May Be Looking At World War III." Business Insider. Business Insider, Inc, 08 Aug. 2011. Web. 16 July 2014.

<<http://www.businessinsider.com/serious-people-are-starting-to-realize-that-we-may-be-looking-at-world-war-iii-2011-8>>. Rickey Kreitner is a writer for the Business Insider Fred).

The statement released Friday by Standard & Poor's explaining its downgrade of the United States' credit rating expressed greater concern about the inability of the American political system to handle troublesome economic realities than it did about those economic realities themselves. It read:¶ "The downgrade reflects our view that the effectiveness, stability, and predictability of American policymaking and political institutions have weakened at a time of ongoing fiscal and economic challenges to a degree more than we envisioned when we assigned a negative outlook to the rating on April 18, 2011."¶ Thus, what directly prompted the historic decision to downgrade the U.S. credit rating was worsening political dysfunction, not the "economic challenges" which Standard & Poor's described as "ongoing." The political, even geopolitical, repercussions of those challenges can only be expected to grow.¶ Noting liberal despair over the government's inability to combat economic depression, and conservative skepticism that traditional tools will be effective, John Judis of The New Republic argues that a global depression far longer and more severe than anyone expected now seems nearly impossible to avoid. Judis believes that the coming "depression" will be accompanied by geopolitical upheaval and institutional collapse.¶ "As the experience of the 1930s testified, a prolonged global downturn can have profound political and geopolitical repercussions. In the U.S. and Europe, the downturn has already inspired unsavory, right-wing populist movements. It could also bring about trade wars and intense competition over natural resources, and the eventual breakdown of important institutions like European Union and the World Trade Organization. Even a shooting war is possible."¶ Daniel Knowles of the Telegraph has noticed a similar trend. In a post titled, "This Really Is Beginning To Look Like 1931," Knowles argues that we could be witnessing the transition from recession to global depression that last occurred two years after the 1929 market collapse, and eight years before Germany invaded Poland, triggering the Second World War:¶ "The difference today is that so far, the chain reaction of a default has been avoided by bailouts. Countries are not closing down their borders or arming their soldiers – they can agree on some solution, if not a good solution. But the fundamental problem – the spiral downwards caused by confidence crises and ever rising interest rates – is exactly the same now as it was in 1931. And as Italy and Spain come under attack, we are reaching the limit of how much that sticking plaster can heal. Tensions between European countries unseen in decades are emerging."¶ Knowles wrote that post three days ago. Since then it has become abundantly obvious that Europe will soon become unwilling or unable to continue bailing out every country with

a debt problem. Meanwhile, the U.S. economy continues to chug along, to the extent it is chugging at all, on the false security offered by a collective distaste for one ratings agency and its poor mathematics.¶ That can't continue forever. The next few months will show S&P's downgrade to have been too little and too late, rather than too drastic and too soon. The Eurozone will fall apart. The American political crisis will only worsen; the "super-committee" will utterly fail, true to design. Soon enough, we may all wake up to a "reckoning" truly deserving of the name.

## **Economic downturn causes great power war, turns every impact.**

**Green and Schrage 9** – Michael, Senior Advisor and Japan Chair at CSIS and Associate Professor at Georgetown, Steven, CSIS Scholl Chair in International Business and a former senior official with the US Trade Representative's Office, State Department and Ways & Means Committee, "It's not just the economy", Asia Times, 3/26, [http://www.atimes.com/atimes/Asian\\_Economy/KC26Dk01.html](http://www.atimes.com/atimes/Asian_Economy/KC26Dk01.html)

Facing the worst economic crisis since the Great Depression, analysts at the World Bank and the US Central Intelligence Agency are just beginning to contemplate the ramifications for international stability if there is not a recovery in the next year. For the most part, the focus has been on fragile states such as some in Eastern Europe. However, **the Great Depression taught us that a downward global economic spiral can even have jarring impacts on great powers. It is no mere coincidence that the last great global economic downturn was followed by the most destructive war in human history.** In the 1930s, **economic desperation helped fuel autocratic regimes and protectionism in a downward economic-security death spiral that engulfed the world in conflict. This spiral was aided by the preoccupation of the United States and other leading nations with economic troubles at home and insufficient attention to working with other powers to maintain stability abroad.** Today's challenges are different, yet 1933's London Economic Conference, which failed to stop the drift toward deeper depression and world war, should be a cautionary tale for leaders heading to next month's London Group of 20 (G-20) meeting. There is no question the US must urgently act to address banking issues and to restart its economy. But the lessons of the past suggest that we will also have to keep an eye on those fragile threads in the international system that could begin to unravel if the financial crisis is not reversed early in the Barack Obama administration and realize that economics and security are intertwined in most of the critical challenges we face. A disillusioned rising power? Four areas in Asia merit particular attention, although so far the current financial crisis has not changed Asia's fundamental strategic picture. China is not replacing the US as regional hegemon, since the leadership in Beijing is too nervous about the political implications of the financial crisis at home to actually play a leading role in solving it internationally. Predictions that the US will be brought to its knees because China is the leading holder of US debt often miss key points. China's currency controls and full employment/export-oriented growth strategy give Beijing few choices other than buying US Treasury bills or harming its own economy. Rather than creating new rules or institutions in international finance, or reorienting the Chinese economy to generate greater long-term consumer demand at home, Chinese leaders are desperately clinging to the status quo (though Beijing deserves credit for short-term efforts to stimulate economic growth). **The greater danger with China is not an eclipsing of US leadership, but instead the kind of shift in strategic orientation that happened to Japan after the Great Depression.** Japan was arguably not a revisionist power before 1932 and sought instead to converge with the global economy through open trade and adoption of the gold standard. The worldwide depression and protectionism of the 1930s devastated the newly exposed Japanese economy and contributed directly to militaristic and autarkic policies in Asia as the Japanese people reacted against what counted for globalization at the time. China today is similarly converging with the global economy, and many experts believe China needs at least 8% annual growth to sustain social stability. Realistic growth predictions for 2009 are closer to 5%. Veteran China hands were watching closely when millions of migrant workers returned to work after the Lunar New Year holiday last month to find factories closed and jobs gone. There were pockets of protests, but nationwide unrest seems unlikely this year, and Chinese leaders are working around the clock to ensure that it does not happen next year either. However, the economic slowdown has only just begun and nobody is certain how it will impact the social contract in China between the ruling communist party and the 1.3 billion Chinese who have come to see President Hu Jintao's call for "harmonious society" as inextricably linked to his promise of "peaceful development". If the Japanese example is any precedent, a sustained **economic slowdown has the potential to open a dangerous path from economic nationalism to strategic revisionism in China too.** Dangerous states It is noteworthy that **North Korea, Myanmar and Iran have all intensified their defiance in the wake of the financial crisis, which has distracted the world's leading nations, limited their moral authority and sown potential discord.** With Beijing worried about the potential impact of North Korean belligerence or instability on Chinese internal stability, and leaders in Japan and South Korea under siege in parliament because of the collapse of their stock markets, leaders in the North Korean capital of Pyongyang have grown increasingly boisterous about their country's claims to great power status as a nuclear weapons state. The junta in Myanmar has chosen this moment to arrest hundreds of political dissidents and thumb its nose at fellow members of the 10-country Association of Southeast Asian Nations. Iran continues its nuclear program while exploiting differences between the US, UK and France (or the P-3 group) and China and Russia - differences that could become more pronounced if economic friction with Beijing or Russia crowds out cooperation or if Western European governments grow nervous about sanctions as a tool of policy. It is possible that the economic downturn will make these dangerous states more pliable because of falling fuel prices (Iran) and greater need for foreign aid (North Korea and Myanmar), but that may depend on the

extent that authoritarian leaders care about the well-being of their people or face internal political pressures linked to the economy. So far, there is little evidence to suggest either and much evidence to suggest these dangerous states see an opportunity to advance their asymmetrical advantages against the international system. Challenges to the democratic model **The trend in East Asia has been for developing economies to steadily embrace democracy and the rule of law in order to sustain their national success. But to thrive, new democracies also have to deliver basic economic growth. The economic crisis has hit democracies hard,** with Japanese Prime Minister Aso Taro's approval collapsing to single digits in the polls and South Korea's Lee Myung-bak and Taiwan's Ma Ying Jeou doing only a little better (and the collapse in Taiwan's exports - particularly to China - is sure to undermine Ma's argument that a more accommodating stance toward Beijing will bring economic benefits to Taiwan). Thailand's new coalition government has an uncertain future after two years of post-coup drift and now economic crisis. The string of old and new democracies in East Asia has helped to anchor US relations with China and to maintain what former secretary of state Condoleezza Rice once called a "balance of power that favors freedom". **A reversal of the democratic expansion of the past two decades would not only impact the global balance of power but also increase the potential number of failed states, with all the attendant risk they bring from harboring terrorists to incubating pandemic diseases and trafficking in persons.** It would also undermine the demonstration effect of liberal norms we are urging China to embrace at home. Protectionism **The collapse of financial markets in 1929 was compounded by protectionist measures** such as the Smoot-Hawley tariff act in 1932. Suddenly, the economic collapse became a zero-sum race for autarkic trading blocs that became a key cause of war. Today, the globalization of finance, services and manufacturing networks and the World Trade Organization (WTO) make such a rapid move to trading blocs unlikely. However, protectionism could still unravel the international system through other guises. Already, new spending packages around the world are providing support for certain industries that might be perceived by foreign competitors as unfair trade measures, potentially creating a "Smoot-Hawley 2.0" stimulus effect as governments race to prop up industries. "Buy American" conditionality in the US economic stimulus package earlier this year was watered down somewhat by the Obama administration, but it set a tempting precedent for other countries to put up barriers to close markets. **Nations pushing the bounds of their trade commitments could overload the circuits of a system that can take two years to determine violations - more than enough time for a global meltdown.** Climate change legislation is also likely to become a stalking horse for protectionism as legislatures enthusiastically embrace punitive tariffs against Chinese or Indian goods that are produced outside of the framework for reducing greenhouse gas emissions. Finally, competitive devaluation - already being pursued by China in the view of some economists - could intensify international protectionism and friction. Global trade has already contracted for the first time in over two decades and governments have only just begun exploring unilateral measures that could cause further barriers. Meanwhile, trade liberalization has stalled in the Doha Round of the WTO and the Obama administration has come into office expressing strong reservations about major bilateral free trade agreements already negotiated with allies like South Korea and Columbia. Even if the clarion call of protectionism does not lead to the kind of autarkic blocs that contributed to war in the 1930s, it could still distract governments from collaboration on common threats and slow the prospects for more rapid recovery.

## **Economic decline causes war – diversionary theory**

### **Domestic turmoil increases risk of military conflict**

**McLaughlin and Tyne 10** – Sara McLaughlin Mitchell University of Iowa Department of Political Science, Clayton L. Tyne University of Kentucky Department of Political Science, Contentious Issues as Opportunities for Diversionary Behavior, Forthcoming in Conflict Management and Peace Science, [http://www.uky.edu/~clthyn2/mitchell\\_tyne\\_CMPS2010.pdf](http://www.uky.edu/~clthyn2/mitchell_tyne_CMPS2010.pdf)

We have a similar expectation regarding past conflict experience in the context of issue claims. **Hensel et al. (2008) find that militarized conflict is much more likely in an issue claim dyad year if states have a history of recent militarized disputes.** What we add here is a diversionary twist to this argument, whereby **past conflict and domestic turmoil create joint conditions for diversionary uses of force. In other words, states should be more likely to pursue militarized options to contest a given issue if they are experiencing domestic turmoil** (e.g. high inflation) and if they have experienced a recent conflict over the issue at hand. Prior wars might be particularly dangerous, especially if one side loses or the war ends in stalemate (Leng 1983).

### **Great powers use diversionary opportunities**

**McLaughlin and Tyne 10** – Sara McLaughlin Mitchell University of Iowa Department of Political Science, Clayton L. Tyne University of Kentucky Department of Political Science, Contentious Issues as Opportunities for Diversionary Behavior, Forthcoming in Conflict Management and Peace Science, [http://www.uky.edu/~clthyn2/mitchell\\_tyne\\_CMPS2010.pdf](http://www.uky.edu/~clthyn2/mitchell_tyne_CMPS2010.pdf)

The other half of the definition of political relevance emphasizes states' military, economic, and demographic capabilities. **Major powers have more opportunities for conflict because their enhanced capabilities extend their military reach, and because their strategic interests are global in nature.** In a split population hazard model that is designed to capture states' opportunity for conflict, Clark and Regan (2003) show that stronger states are much more likely to be in the conflict-rich opportunity group. **In the context of diversionary behavior, major powers have been shown to have greater opportunities for uses of force. The strongest diversionary evidence stems from analyses of force initiation by the United States and Great Britain, both global powers** (Ostrom and Job 1986; Morgan and Bickers 1992; DeRouen 1995; Fordham 1998, 2002; Morgan and Anderson 1999). **Furthermore, while rivalries create more opportunities for diversion in general (Mitchell and Prins 2004), major powers are able to target rival and non-rival states in bad economic times (Foster 2006).**

## Economic decline fosters terrorism

**Economic growth decreases the likelihood of terrorism – even if they do attack it makes recovery easier**

**Gries, Krieger, Meierrieks 9** (Thomas, Tim, Daniel, University of Paderborn, Department of Economics, 2/17/2009, "Causal Linkages Between Domestic Terrorism and Economic Growth," ND)

**The results of our Hsiao-Granger causality analysis indicate that economic factors at least in some countries played an important role in shaping terrorist violence in Western Europe after the Second World War.** In general, we provide support for policies that aim at increasing the opportunity costs of terror as, for instance, advocated by Frey and Luechinger (2003). Apparently **economic success especially in Germany, Portugal and Spain helped to reduce political violence by raising the opportunity costs of terrorism. Policies that focus on growth and economic development are thus also potentially helpful in scaling down terror risks.** Related policies may yield additional dividends beyond raising economic status, as social stability and peace may also be affected. **For Western Europe, developed welfare states may provide important institutional channels for disseminating economic success, likewise explaining a link from economic performance to domestic terrorism.**<sup>17</sup> Our results also imply that **domestic terrorist violence did not affect GDP per capita growth. Affected economies seem to have been generally successful in dealing with terror risks.** Markets and institutions appear to have adjusted effectively to terror risks. In general, we argue that (i) **policies that aim at improving economic status should also be pursued because they may robustly reduce the propensity towards domestic terrorism at least in some countries. The opportunity costs of violence and the general influence of economic factors on terror should not be disregarded.** (ii) **Policies that aim to increase the efficiency of markets and institutions should also be undertaken because they help to protect economies from the negative effects of terrorism** by increasing markets and institutions resiliency to terrorist attacks.

## **Conditions of economic downturn fosters conditions for terrorism**

**Bremmer 9** (Ian, president of Eurasia Group, a political-risk consultancy, "Call: Global Recession = More Terrorism," Foreign Affairs, 3/4/09, [http://eurasia.foreignpolicy.com/posts/2009/03/04/the\\_global\\_recession\\_heightens\\_terrorist\\_risks](http://eurasia.foreignpolicy.com/posts/2009/03/04/the_global_recession_heightens_terrorist_risks) )

Across Pakistan, suicide bombers killed two people in 2005, six in 2006, 56 in 2007, and 61 in 2008. Suicide attackers killed more people in Pakistan last year than in either Iraq or Afghanistan. **There are two important reasons why the threat of global terrorism is growing. The first is long-term and structural. The second is more directly tied to the global financial crisis.** Both have everything to do with what's happening in Pakistan. First, a report released in December from the U.S. Commission on the Prevention of Weapons of Mass Destruction, Proliferation, and Terrorism hints at both sets of problems. The report notes an increasing supply of nuclear technology and material around the world and warns that "without greater urgency and decisive action by the world community, **it is more likely than not that a weapon of mass destruction will be used in a terrorist attack somewhere in the world by the end of 2013.**" **Destructive (and potentially destructive) technologies are now more accessible than at any time in history for small groups and even individuals. This will dramatically increase the baseline threat of disruptive violence from non-state actors over time. It's not just biological and nuclear material.** GPS tracking devices help pirates operating off Somalia's coast venture further from shore and undertake increasingly ambitious attacks on private and commercial vessels. Second, **it's unlikely that we'll see the "greater urgency and decisive action by the world community"** called for in the report. For the moment, political leaders around the world are too busy wrestling with the effects of the global financial crisis on their domestic economies (and their political standing) to coordinate action against such a diffuse threat. **But there's another reason why the financial crisis heightens the risk of global terrorism. Militants thrive in places where no one is fully in charge. The global recession threatens to create more such places. No matter how cohesive and determined a terrorist organization, it needs a supportive environment in which to flourish.** That means a location that provides a steady stream of funds and recruits and the support (or at least acceptance) of the local population. Much of the counter-terrorist success we've seen in Iraq's al Anbar province over the past two years is a direct result of an increased willingness of local Iraqis to help the Iraqi army and US troops oust the militants operating there. In part, that's because the area's tribal leaders have their own incentives (including payment in cash and weaponry) for cooperating with occupation forces. But it's also because foreign militants have alienated the locals. The security deterioration of the past year in Pakistan and Afghanistan reflects exactly the opposite phenomenon. In the region along both sides of their shared border, local tribal leaders have yet to express much interest in helping Pakistani and NATO soldiers target local or foreign militants. For those with the

power to either protect or betray the senior al-Qaeda leaders believed to be hiding in the region, NATO and Pakistani authorities have yet to find either sweet enough carrots or sharp enough sticks to shift allegiances. The slowdown threatens to slow the progress of a number of developing countries. Most states don't provide ground as fertile for militancy as places like Afghanistan, Somalia, and Yemen. But as more people lose their jobs, their homes, and opportunities for prosperity -- in emerging market countries or even within minority communities inside developed states -- it becomes easier for local militants to find volunteers. This is why the growing risk of attack from suicide bombers and well-trained gunmen in Pakistan creates risks that extend beyond South Asia. This is a country that is home to lawless regions where local and international militants thrive, nuclear weapons and material, a history of nuclear smuggling, a cash-starved government, and a deteriorating economy. Pakistan is far from the only country in which terrorism threatens to spill across borders

## **Recession radicalize social structure – creating better recruitment environment**

**The Irish Times 8** (“Leaked British Report warns recession may lead to surge in terrorism,” 9/2/08, Lexis)

An economic downturn in Britain could aggravate racial tensions and grievances that help to feed terrorist recruitment, according to a leaked British government document. The draft letter from the Home Office warned that a recession could create conditions likely to increase support for radical Islamist groups. As jobs become more scarce, "we should expect increased public hostility to migrants", said the leaked memo, entitled Responding to Economic Challenges. "There is also a risk of a downturn increasing the appeal of far-right extremism and racism, which presents a threat as there is evidence that grievances based on experiencing racism are one of the factors that can lead to people becoming terrorists," the memo claimed. The warning came after British finance minister Alistair Darling said the current slump could be the worst for 60 years - increasing pressure on prime minister Gordon Brown, who is trailing the opposition Conservatives in the polls. The downturn has already seen house prices tumble, the pound fall against the dollar and economic growth grind to a halt for the first time since 1992. A Home Office spokeswoman said yesterday that the letter contained draft advice to Mr Brown's 10 Downing Street office, but was never sent. "We do not normally comment on leaked documents but this is draft advice that the home secretary has not cleared and has not been sent to Number 10," the department added in a statement. "It is, however, appropriate that the Home Office considers the effects the economic climate may have on crime and other policy areas." Britain has been a frequent target of plots by militant groups which accuse it of waging war against Islam by supporting the United States in the invasions of Afghanistan and Iraq. The MI5 intelligence agency has said it knows of at least 2,000 British-based individuals who pose a direct threat to national security because of their support for terrorism. In 2005, four young British Muslims with links to al-Qaeda carried out suicide bombings on London's transport network, killing 52. - (Reuters)

## Hyperinflation leads to economic decline

### Hyperinflation causes economic decline

**Patton 2014** (Mike Patton, 4/28/14, Forbes, "Is U.S. Hyperinflation Imminent?" , <http://www.forbes.com/sites/mikepatton/2014/04/28/is-u-s-hyperinflation-imminent/> , Access date: 7/16/14 , AW)

The beneficiaries of high inflation include any individual or entity who has borrowed money at a fixed rate. High inflation also benefits investors who own commodities, and businesses that derive a significant portion of revenue from exports. Who loses with inflation? **First, the overall economy suffers. Specifically, consumers lose purchasing power and their standard of living erodes.** Lenders are also hurt as are those who need to borrow. The latter group suffers because lenders raise their interest rates to hedge against inflation. In short, **money becomes much more expensive.** Finally, import-oriented businesses struggle when inflation is high. **Hyperinflation, on the other hand, hurts almost everyone. It decimates the middle class. It can cause massive bank failures, especially banks with large amounts of outstanding fixed-rate loans.** And, although borrowers who have a fixed rate loan do benefit, because prices on everything else are increasing so rapidly, **any benefit from the loans is erased by the extreme cost of goods and services. There really are no winners with hyperinflation.**

**Potential for Hyperinflation in the U.S. Today** Could the U.S. experience hyperinflation? **If you look at the amount of the Fed's monetary expansion since 2008, then you would likely conclude yes. For example, when the financial crisis began, the Fed's balance sheet was around \$800 billion. Today, it is over \$4 trillion. That's a tremendous increase.** However, it's important to note that the majority of this new money is sitting at the Federal Reserve and has not actually entered the economy. If this were not the case, if all this capital were allowed to enter the economy, inflation would be very high. Perhaps not hyperinflation, but I believe it would be much higher than it was during the late 1970s. Why would the Fed flood the market with so much money if it wasn't intended to enter the economy? Because **during the 2008 crisis, not counting the banks that did go out of business, a large number of other banks nearly collapsed. The actions of the Fed were nothing short of brilliant. They created a glut of new money through T.A.R.P., QEII, Operation Twist and QEIII. Then they offered to pay interest to banks on their reserves, which from a financial standpoint made it profitable to banks to leave large amounts on reserve. Hence, with the majority of this new money in reserve, bank balance sheets have been greatly strengthened.** It's important to note that the financial sector must be strong if the economy is to thrive. The Fed's challenge will come when it's time to unwind it all. With over \$4.2 trillion on the Fed's balance sheet (\$3.8 trillion more than at the beginning of the crisis), when demand finally increases and lenders need more capital to lend, or when the Fed decides not to pay interest on bank reserves, the Fed will have to reverse course and, instead of buying bonds (which removes cash from its balance sheet and increases the money supply), it will be selling bonds (removing cash from the economy, reducing the money supply). This is where things could get dicey. This is also why the Fed would like to end QEIII as soon as possible. Because the longer it continues, the more money there will be to remove and this could cause a severe dislocation in the financial markets. In other words, when the Fed ceases QEIII, the stock market could decline along with bond prices.





## Growth good – democracy

**Economic growth strengthens democracy, WWII proves  
Delong, economics professor at UC Berkeley, 2006**

(J. Bradford, “Growth is Good”, Harvard Magazine, January/February,  
<http://harvardmagazine.com/2006/01/growth-is-good.html>)

Benjamin M. Friedman ’66, Jf ’71, Ph.D. ’71, Maier professor of political economy, now fills in this gap: he makes a powerful argument that—politically and sociologically—**modern society is a bicycle, with economic growth being the forward momentum that keeps the wheels spinning. As long as the wheels of a bicycle are spinning rapidly, it is a very stable vehicle indeed.** But, he argues, when the wheels stop—even as the result of economic stagnation, rather than a downturn or a depression—political democracy, individual liberty, and social tolerance are then greatly at risk even in countries where the absolute level of material prosperity remains high. Consider just one of his examples—a calculation he picks up from his colleague Alberto Alesina, Ropes professor of political economy, and others: **in an average country in the late twentieth century, real per capita income is falling by 1.4 percent in the year in which a military coup occurs; it is rising by 1.4 percent in the year in which there is a legitimate constitutional transfer of political power; and it is rising by 2.7 percent in the year in which no major transfer of political power takes place.** If you want all kinds of non-economic good things, **Friedman says—like openness of opportunity, tolerance, economic and social mobility, fairness, and democracy—rapid economic growth makes it much, much easier to get them; and economic stagnation makes getting and maintaining them nearly impossible.** The book is a delight to read, probing relatively deeply into individual topics and yet managing to hurry along from discussions of political order in Africa to economic growth and the environment, to growth and equality, to the Enlightenment thinkers of eighteenth-century Europe, to the twentieth-century histories of the major European countries, to a host of other subjects. Yet each topic’s relationship to the central thesis of the book is clear: **the subchapters show the virtuous circles (by which economic growth and sociopolitical progress and liberty reinforce each other) and the vicious circles (by which stagnation breeds violence and dictatorship) in action. Where growth is rapid, the movement toward democracy is easier and societies become freer and more tolerant. And societies that are free and more tolerant (albeit not necessarily democratic) find it easier to attain rapid economic growth.** Friedman is not afraid to charge head-on at the major twentieth-century counterexample to his thesis: the Great Depression in the United States. Elsewhere in the world, that catastrophe offers no challenge to his point of view. **Rising unemployment and declining incomes in Japan in the 1930s certainly played a role in the assassinations and silent coups by which that country went from a functioning constitutional monarchy with representative institutions in 1930 to a fascist military dictatorship in 1940—a dictatorship that, tied down in a quagmire of a land war in Asia as a result of its attack on China, thought it was a good idea to attack, and thus add to its enemies, the two superpowers of Britain and the United States. In western Europe the calculus is equally simple: no Great Depression, no Hitler.** The saddest book on my shelf is a 1928 volume called Republican Germany: An Economic and Political Survey, the thesis of which is that **after a decade of post-World War I political turmoil, Germany had finally become a stable, legitimate, democratic republic. And only the fact that the Great Depression came and offered Hitler his opportunity made it wrong.**

**Growth key to democracy-frees up the middle class  
Baumol et al., NYU economics professor, 2007**

(William, Good Capitalism, Bad Capitalism, and the Economics of Growth and Prosperity, 129-131)

Now, ask the question the other way around: **does economic growth lead to democracy?** Certainly **the experience of South Korea**, which for decades after World War II was essentially **a benevolent autocracy but eventually became a democratic form of government, supports this view** (Glaser et al., 2004). **As incomes grow, so does a country's middle class, which is more likely and able to demand political freedom.** Conversely, there is ample evidence that countries already democratic are likely to backslide from that form of government when their economics perform poorly. It is striking, for example, that **three-fourths of the collapses of democracies since 1977 were preceded by stagnant growth.** But skeptics remain about the inevitability of democracy following strong economic growth. China has become a flash point. To some, continued growth in China may only strengthen the hand of the state and make it easier to deny political freedom (Bueno de Mesquita and Downs, 2005). Or as China gains economic strength, it will have more resources to pursue expansionist military objectives. At this point, of course, it is impossible to know whether the optimists or pessimists will prove to be correct about China. Our own view is that the odds are with the optimist—namely, that economic growth eventually will help democratize China, as it will other countries but there can be no guarantee of this result. **One reason for being optimistic is to look to America's early history and especially the experiences of many of the country's founding fathers, which demonstrate that business skills can hone the talents needed to achieve and maintain self-governance.** Benjamin Franklin, one of the authors of the Declaration of Independence, left copious writing describing how he had developed his diplomatic skills in the course of establishing himself as a printer. Paul Revere, a silversmith, was a consummate networker who used business contacts to coordinate the revolutionary effort. Alexander Hamilton, who managed clerical office while still in his teens, later applied those skills to organize the Department of the Treasury. Even Thomas Jefferson, Hamilton's adversary, who argued that America should remain a nation of farmers, was hardly the stereotypical rustic at the plow. He managed a sizable plantation and sought more scientific ways to cultivate it. In short, he was much like the best American entrepreneurs: a striver and learner, often brimming with ego and unconventional opinions, but civic-minded and, in the end, a farsighted philanthropist. **In short, the experience of economic freedom seems to breed both the skills and the inclination for political freedom.** China's business leaders may not be able to steer their country in the same way. But does that possibility mean that other countries—the United States, in particular—should do their best to thwart economic growth in China (or in other autocratically ruled countries, for that matter)? In our view, such a course is a recipe for a much more dangerous world. **Autocrats who are shunned by rich countries would thus be given easy scapegoats for their countries' poor economic performance. The politics of "blaming foreigners" has a long and unfortunately successful history. Why give autocrats such easy ammunition? We believe the better course is to urge autocracies at least to recognize economic rights— in particular, the ability to start a business and be rewarded if successful. The odds in our view suggest that political rights eventually will follow.**

## Democracy good – reduces the risk of nuclear war

Joshua Muravchik 7/11/01 (Resident Scholar American Enterprise Institute, [www.npec-web.org/syllabi/muravchik.htm](http://www.npec-web.org/syllabi/muravchik.htm))

**The greatest impetus for world peace -- and perforce of nuclear peace -- is the spread of democracy.** In a famous article, and subsequent book, Francis Fukuyama argued that democracy's extension was leading to "the end of history." By this he meant the conclusion of man's quest for the right social order, but he also meant the "diminution of the likelihood of large-scale conflict between states." (1) Fukuyama's phrase was intentionally provocative, even tongue-in-cheek, but he was pointing to two down-to-earth historical observations: that **democracies are more peaceful than other kinds of government and that the world is growing more democratic.** Neither point has gone unchallenged. Only a few decades ago, as distinguished an observer of international relations as George Kennan made a claim quite contrary to the first of these assertions. Democracies, he said, were slow to anger, but once aroused "a democracy . . . fights in anger . . . to the bitter end." (2) Kennan's view was strongly influenced by the policy of "unconditional surrender" pursued in World War II. But subsequent experience, such as the negotiated settlements America sought in Korea and Vietnam proved him wrong. **Democracies are not only slow to anger but also quick to compromise. And to forgive.** Notwithstanding the insistence on unconditional surrender, America treated Japan and that part of Germany that it occupied with extraordinary generosity. In recent years **a burgeoning literature has discussed the peacefulness of democracies. Indeed the proposition that democracies do not go to war with one another has been described by one political scientist as being "as close as anything we have to an empirical law in international relations."** (3) Some of those who find enthusiasm for democracy off-putting have challenged this proposition, but their challenges have only served as empirical tests that have confirmed its robustness. For example, the academic Paul Gottfried and the columnist-turned-politician Patrick J. Buchanan have both instanced democratic England's declaration of war against democratic Finland during World War II. (4) In fact, after much procrastination, England did accede to the pressure of its Soviet ally to declare war against Finland which was allied with Germany. But the declaration was purely formal: no fighting ensued between England and Finland. Surely this is an exception that proves the rule. Continues... **This progress offers a source of hope for**

enduring nuclear peace. The danger of nuclear war was radically reduced almost overnight when Russia abandoned Communism and turned to democracy. For other ominous corners of the world, we may be in a kind of race between the emergence or growth of nuclear arsenals and the advent of democratization. If this is so, the greatest cause for worry may rest with the Moslem Middle East where nuclear arsenals do not yet exist but where the prospects for democracy may be still more remote.

## Growth good – food security

### **Growth historically promotes agriculture**

**Ferrara 12**—forbes policy contributor [Peter, “Economic Growth, Not Redistribution, Most Benefits The Poor, Working People, And The Middle

Class” 11/15/2012, <http://www.forbes.com/sites/peterferrara/2012/11/15/economic-growth-not-redistribution-most-benefits-the-poor-working-people-and-the-middle-class/>, accessed 7/16 ]RMT

**Also greatly contributing to the well-being of working people, the middle class, and the poor in America has been the dramatically declining cost of food resulting from economic growth and soaring productivity in agriculture.** As Moore and Simon report, **“Americans devoted almost 50 percent of their incomes to putting food on the table in the early 1900s compared with 10 percent in the late 1900s.”** While **most of human history has involved a struggle against starvation, today in America the battle is against obesity, even more so among the poor.** Moore and Simon quote Robert Rector of the Heritage Foundation, **“The average consumption of protein, minerals, and vitamins is virtually the same for poor and middle income children, and in most cases is well above recommended norms for all children. Most poor children today are in fact overnourished.”** That cited data comes from the **U.S. Census Bureau.** As a result, **poor children in America today “grow up to be about 1 inch taller and 10 pounds heavier than the GIs who stormed the beaches of Normandy in World War II.”** That has resulted from a **U.S. agricultural sector that required 75% of all American workers in 1800, 40% in 1900, and just 2.5% today, to “grow more than enough food for the entire nation and then enough to make the United States the world’s breadbasket.”** Indeed, today, **“The United States feeds three times as many people with one-third as many total farmers on one-third less farmland than in 1900,”** in the process producing **“almost 25 percent of the world’s food.”**

## **Growth good - solves disease**

### **Growth improves quality of life and solves disease—history proves**

**Ferrara 12**—forbes policy contributor [Peter, “Economic Growth, Not Redistribution, Most Benefits The Poor, Working People, And The Middle

Class” 11/15/2012, <http://www.forbes.com/sites/peterferrara/2012/11/15/economic-growth-not-redistribution-most-benefits-the-poor-working-people-and-the-middle-class/>, accessed 7/16 ]RMT

Indeed, in 1900 only 2% of homes in America enjoyed electricity. As Cox and Alm note further in their insightful Myths of Rich and Poor, “Homes aren’t just larger. They’re also much more likely to be equipped with central air conditioning, decks and patios, swimming pools, hot tubs, ceiling fans, and built in kitchen appliances. Fewer than half of the homes built in 1970 had two or more bathrooms; by 1997, 9 out of 10 did.” Such economic growth produced dramatic improvements in personal health as well. Throughout most of human history, a typical lifespan was 25 to 30 years, as Moore and Simon report. But “from the mid-18th century to today, life spans in the advanced countries jumped from less than 30 years to about 75 years.” Average life expectancy in the U.S. has grown by more than 50% since 1900. Infant mortality declined from 1 in 10 back then to 1 in 150 today. Children under 15 are at least 10 times less likely to die, as one in four did during the 19th century, with their death rate reduced by 95%. The maternal death rate from pregnancy and childbirth was also 100 times greater back then than today. Moore and Simon report, “Just three infectious diseases – tuberculosis, pneumonia, and diarrhea – accounted for almost half of all deaths in 1900.” Today, we have virtually eliminated or drastically reduced these and other scourges of infectious disease that have killed or crippled billions throughout human history, such as typhoid fever, cholera, typhus, plague, smallpox, diphtheria, polio, influenza, bronchitis, whooping cough, malaria, and others. Besides the advances in the development and application of modern health sciences, this has resulted from the drastic reduction in filthy and unsanitary living conditions that economic growth has made possible as well. More recently, great progress is being made against heart disease and cancer.

### **Economic decline forces cuts in funding for disease prevention and treatment – worsens disease spread**

Dr Andrew **Robertson**, [an editorial published online in Emerging Health Threats Journal. In Physorg.com] June 12th, **2009** (“Economic downturn will have severe, far-reaching effects on global health

”) <http://www.physorg.com/news163993567.html>

There are concerns that the financial crisis has already hit tuberculosis control, which has global ramifications, says Robertson. “There are already indications that funding for TB diagnosis and management is decreasing in developing countries and a surge of new cases there may flow onto the US and other countries,” he says. Healthcare in developed countries will also suffer if budgets are cut and incomes fall. Fewer people are accessing private health services in the USA, which will increase the burden on public health services. Resources for disease surveillance are often cut back during difficult economic times, jeopardising the systems we rely on to identify and deal with emerging diseases - including the current swine flu epidemics. The 1995 economic crisis in Mexico led to 27,000 excess deaths in that country alone - but the effect of this far greater, global downturn is currently “impossible to quantify,” according to Robertson.

## Growth allows for effective measures to prevent disease

**Fidler, 8** (David P., Professor of Law, Indiana University, University Center on American and Global Security, "After the Revolution: Global Health Politics in a Time of Economic Crisis and Threatening Future Trends," Global Health Governance, Fall 2008/Spring 2009, Volume 2, Number 2, Tashma)

Further, the global economic crisis is absorbing ever larger amounts of capital to keep governments, financial institutions, and corporations afloat, which drastically reduces the availability of resources for addressing the growing costs of providing adequate public health and health care for populations around the world. Even before the global economic crisis hit, experts argued that the unprecedented increases in national spending and development assistance for health were inadequate and, even worse, that many developed donor countries had not fulfilled existing aid pledges.<sup>56</sup> Thus, maintaining existing levels of domestic spending and development assistance on health would not be sufficient, but increased expenditures seem unlikely for years while the global economy recovers. The more likely scenario is reductions in health spending within national budgets and in foreign aid programs. Such reductions, even if shortlived, will have a severe impact on global health activities already desperately in need of more financial resources. Perhaps the cruelest irony of the global economic crisis is its emergence in the year WHO and global health stakeholders renewed the push for achieving primary health care for all. The report of the Commission on Social Determinants of Health advocated for primary health care in 2008.<sup>57</sup> The World Health Report 2008 focused on primary health care,<sup>58</sup> and the WHO Director-General connected the new emphasis on primary health care to the Declaration of AlmaAta, which first launched the "health for all" strategy based on universal primary health care in 1978.<sup>59</sup> However, 30 years ago, the Alma-Ata strategy was derailed by developments in the energy and economic sectors that sound ominously familiar, as the WHO Director-General recognized in September 2008: Nor could the visionary thinkers in 1978 have foreseen world events: an oil crisis [that began in 1979], a global recession [in the early 1980s], and the introduction [in the 1980s], by development banks, of structural adjustment programmes that shifted national budgets away from the social services, including health. As resources for health diminished, selective approaches using packages of interventions gained favour over the intended aim of fundamentally reshaping health care. The emergence of HIV/AIDS, the associated resurgence of tuberculosis, and an increase in malaria cases moved the focus of international public health away from broad-based programmes and towards the urgent management of highmortality emergencies.<sup>60</sup> The effort to rejuvenate the primary health care movement in a year in which global food, energy, and economic crises emerged proved ill-timed, and the worsening nightmare of the global economic crisis threatens even more damage to the political, economic, and social conditions needed to achieve progress on universal primary health care. Put another way, political, economic, and intellectual capital for advancing the primary health care agenda will, for the foreseeable future, be in short supply. Instead, as with the energy and food crises, global health finds itself scrambling to address an emergency with potentially devastating consequences for the health of individuals and populations, health services and systems, and the social determinants of health.

## **Growth good – environmental protection**

### **Economic growth key to biodiversity**

#### **The Economist, 13**

(The Economist, “Hang On”, 9/14, <http://www.economist.com/news/leaders/21586346-more-growth-not-less-best-hope-averting-sixth-great-extinction-hang>, date accessed: 10/4/13, EIL)

Over the past few centuries **mankind’s economic growth has caused many of the problems that other species face.** But as our special report this week argues, **greater human prosperity now offers other species their best chance of hanging on.** What did for the dinosaurs There have been five great extinctions in the history of Earth. One killed off the dinosaurs; another wiped out up to 96% of species on Earth. All were probably caused by geological events or asteroids. Many scientists think a sixth is under way, this one caused by man. From the time that he first sharpened a spear, technological progress and economic growth have allowed man to dominate the planet. He is reckoned to be responsible for wiping out much of the megafauna—giant elk, aurochs, marsupial lions—that once populated Earth. When he paddled across the Pacific he exterminated 50-90% of the bird life on the islands he colonised. Technology allowed him to kill creatures and chop down forests more efficiently and to produce enough food to sustain 7 billion people. As a result, over the past few centuries extinctions are thought to have been running at around 100 times the rate they would run at in his absence. **Yet when people start to reach middle-income level, other species start to benefit. That is partly because as people get richer, their interests begin to extend beyond necessities towards luxuries:** for some people that means expensive shoes, for others a day’s bird-watching. **Green pressure groups start leaning on government, and governments pass laws to constrain companies from damaging the environment.** In the West, a posse of pressure groups such as Greenpeace and the Environmental Defence Fund started up in the 1960s and helped bring about legislation in the 1970s and 1980s. **Growth also has indirect benefits for biodiversity. People clean up their environment in ways that help other species: through building sewage-treatment plants, for instance, and banning factories from pouring effluent into rivers. Prosperity and peace tend to go together, and conflict hurts other creatures as well as man, as the wars in the Congo have shown. Richer countries generally have better governments, and conservation cannot work without an effective state. Agricultural yields rise, allowing more food to be produced on less land. Population growth rates fall: in East Asia, fertility has dropped from 5.3 children per woman in the 1960s to 1.6 now.** One consequence is that in rich countries conditions for other species are, by and large, improving, and endangered creatures are moving away from the edge of the cliff. America’s bald eagle, for instance, was down to 412 breeding pairs in the 1960s. There are now 7,066. Whale populations are mostly recovering thanks to a moratorium on commercial whaling. More broadly, the Living Planet Index, a compilation of a wide range of indicators of biodiversity produced by the Zoological Society of London and WWF, has risen over the past 40 years in temperate (generally rich) countries and fallen in tropical (generally poor) ones. **This is not just because rich countries export their growth to emerging markets. Look, for instance, at the fate of the forests on the Korean peninsula: in South Korea, one of the world’s fastest-growing countries in recent decades, forest cover is stable, whereas North Korea has lost a third of its forests in the past 20 years. Nobody exported their growth to North Korea. In emerging markets some indicators are improving as people press governments to look after the environment better. Deforestation in the Brazilian Amazon, for instance, has fallen from 28,000 sq km in 2004 to 5,000 sq km last year. From a standing start in 1982, China has given over three times as much land to national parks as America has.** Gee up GM  
But the problem is by no means solved. Thousands of species are teetering on the edge of extinction. Whether or not they tip over depends in large part on two factors. One is climate change. If the temperature increase is at the medium to high end of the estimated range, then a biodiversity catastrophe is very likely. If it remains at the lower end—which the current hiatus in warming suggests is possible—then most species should not be too badly affected. The second is the demand for land. Habitat loss is the biggest threat to biodiversity. Mankind already cultivates



around 40% of Earth's land surface, and the demand for food is expected to double by 2050. If that demand is to be met without much more land being ploughed, yields will have to increase sharply. That means more fertiliser, pesticide and genetically modified (GM) seeds. For this to happen, the green movement needs to change its attitude. It has helped other species by pressing governments for change, but some greens want growth to slow and most oppose intensive farming. They have made Europe a no-go zone for new GM crops, and have exported their damaging prejudices to Africa and Asia, to the detriment of biodiversity. No doubt most of the planet's other species would have been better off if mankind had never lifted that first spear. The technological progress and economic growth that followed have brought Earth to the edge of the sixth great extinction. But more progress not less offers the best chance of averting it. The Hainan gibbon's current plight is an improvement on ten years ago, when the chorus was down to a dozen. With a great deal of care, it might just survive to sing for many years yet. From the print edition: Leaders

## **Growth solves pollution and improve the environment**

**Ferrara 12**—forbes policy contributor [Peter, "Economic Growth, Not Redistribution, Most Benefits The Poor, Working People, And The Middle Class" 11/15/2012, <http://www.forbes.com/sites/peterferrara/2012/11/15/economic-growth-not-redistribution-most-benefits-the-poor-working-people-and-the-middle-class/>, accessed 7/16 ]RMT

Moreover, it is economic growth that has provided the resources enabling us to dramatically reduce pollution and improve the environment, without trashing our standard of living. Moore and Simon write that at the beginning of the last century, "Industrial cities typically were enveloped in clouds of black soot and smoke. At this stage of the industrial revolution, factories belched poisons into the air—and this was proudly regarded as a sign of prosperity and progress. Streets were smelly and garbage-filled before the era of modern sewage systems and plumbing." The point of recounting this progress in the last century is that with exploding modern science, economic growth in the next century can be even more rapid, perhaps twice as fast, or more. Such booming economic growth would produce surging revenues that would make balancing the budget so much more feasible. Surging GDP would reduce the national debt as a percent of GDP relatively quickly, particularly with balanced budgets not adding any further to the debt.

## **Private sector economics is key – federal regulation solves implementation problems**

**Veugelers 12** (Reinhilde, Professor at KULeuven, Senior Fellow at Bruegel, Research Fellow at CEPR, Summer 2012, "Which policy instruments to induce clean innovating?" ND)

In view of the sizeable climate change challenge, we need a clean innovation machine operating at full speed. Beyond the supply of public clean R&D infrastructure and clean public purchases, the development and adoption of new clean technologies by the private sector needs to be assured to reduce Green House Gas (GHG) emissions. The private clean innovation machine, left on its own, is not up to this challenge. It needs government intervention to address the combination of environmental and knowledge externalities and overcome path dependencies. A technology policy for climate change requires a combination of technology supply side instruments next to demand-inducing instruments. The firm level evidence presented in this contribution on the motives of private sector firms for introducing clean innovations from the latest Flemish CIS eco-innovation survey confirms that firms are responsive to eco-policy demand interventions. The high importance of demand pull from customers and voluntary codes of conduct or voluntary sector agreements as drivers for introducing clean innovations, is a reminder of the internal strength of the private innovation machine, which

**governments need to leverage. Policy interventions are more powerful to induce the adoption and development of new clean technologies when designed in policy mix** and time consistently, affecting future expectations.

## **Policy action to spur private sector green tech solves best – ensures profit while solving climate change**

**Veugelers 12** (Reinhilde, Professor at KULeuven, Senior Fellow at Bruegel, Research Fellow at CEPR, Summer 2012, “Which policy instruments to induce clean innovating?” ND)

**The climate change challenge can be met effectively only by a clean innovation machine** that is operating at full speed. In addition to publicly support for R&D infrastructure and public procurement, **the development and adoption of new clean technologies by the private sector is essential to the needed transformation in the energy-economic system for reductions in Green House Gas (GHG) emissions. The private clean innovation machine, left on its own, is not up to this challenge. Government intervention is needed to address the combination of environmental and knowledge externalities and to overcome path dependencies.** The evidence on current clean innovation performance hints at the failure so far of government intervention to fully activate the private clean innovation machine. **If governments want to leverage the needed private innovations for clean energy technologies, they will have to provide a well- designed, time consistent policy, by a combination of consistent carbon pricing, performance based regulations and public funding.** The evidence from earlier micro-econometric studies, on patent data and from selected environmental technologies shows that **government intervention can affect private sector innovations, albeit with substantial variation among policy instruments and technologies.** The firm-level evidence presented in this contribution on the motives for introducing clean innovations from the latest Flemish CIS eco-innovation survey confirms that **firms are responsive to eco-policy interventions. The evidence is also suggestive of how important the details of the policy design are. The evidence supports the increased leverage of policies when combining regulations & taxes with subsidies, particularly for the adoption of innovations to reduce CO2 emissions. This complementarity between policy instruments for accelerating the adoption of CO2-reducing innovations is particularly important to take into account for the design of public clean subsidy policies, as the current evidence provides little support for the efficacy of subsidies for CO2 reducing innovations, when used in isolation.** It is a reminder for those governments contemplating a public clean R&D support program that the **lack of a strong carbon price expected to prevail in future will seriously reduce the effectiveness of subsidies as policy instrument to leverage private innovative incentives for climate change. The intertemporal consistency of policy is relevant to all types of eco-innovations, but especially important for climate change innovations and more so for developers than for adopters.** Policy interventions will have greater influence on the adoption and development of new clean technologies when designed to be credible and consistent over time, affecting future expectations more than current incentives. 27 Finally, **the high importance of demand pull from customers and voluntary sectoral codes of conduct or voluntary sector agreements as drivers for firms introducing clean innovations, is a reminder of the internal strength of the private innovation machine. Governments should leverage this power, by a time consistent clean-tech policy** design affecting the expectations of the market.

## **Economic growth improves environmental outcomes over the long term**

**Goklany 9** – Indur M. Goklany is the Assistant Director for Science and Technology Policy, Office of Policy Analysis, US Department of the Interior, and co-editor of the Electronic Journal of Sustainable

Development, Have increases in population, affluence and technology worsened human and environmental well-being?, The Electronic Journal of Sustainable Development (2009) 1(3)

Second, **but for technological change, impacts would generally have been much higher, in many instances by an order of magnitude or more.** For instance, **per unit of GDP, technological change reduced the global environmental impact of agriculture by 84 percent from 1950 to 2005.** In fact, it has stabilized the amount of habitat converted to cropland in the U.S. and almost stabilized it globally (Figures 10 and 11). During the 20th century, it reduced death rates from various water related diseases in the U.S. by 99.6–100 percent. It also reduced the cumulative global death rate from extreme weather events by 95 percent, while reducing U.S. death rates from hurricanes, lightning, floods and tornados by 16–95 percent. Because of technology, U.S. indoor air pollution levels are currently 96 to 99 (+) percent lower than they otherwise would be. However, while technology reduced the rate of increase, CO<sub>2</sub> emissions, nevertheless, grew substantially. Third, improvements are apparently more pronounced for indicators most directly related to human well-being. Specifically, for each pollutant, indoor air quality improved earlier and faster than outdoor emissions (which comprise the bulk of emissions), and mortality rates were reduced more than indicators whose relationship to public health is more indirect. With respect to global warming related indicators, mortality rates from total extreme weather events declined substantially, although carbon dioxide emissions increased despite reductions in the carbon intensities of economies. The latter is true even in India and China, where recent improvements in carbon intensities coincide with the initiation of economic liberalization, despite generous fuel subsidies to consumers. **For the environmental indicators used to characterize the impacts on land, air, and water – cropland, indoor air quality, traditional air pollutant emissions, and mortality from water-related diseases – technological change generally more than compensated for any long term increase that might have occurred in impact due to increases in either population or affluence,** but not always for the combined effect of the two (i.e.,  $P \times A$ ). The exceptions to this are: (a) U.S. NO<sub>x</sub> emissions where technology compensated for population increase between 1900 and 2003, but not for affluence, (b) water withdrawals for the U.S. from 1950–2000, where technology compensated for population but not for affluence, and (c) global water withdrawals and consumption from 1900–1995, where technology failed to keep pace with either population or affluence. What the table does not show is that **even where technology was unable fully to compensate for the increase in aggregate output over the entire period – water withdrawals and national air emissions are cases in point – it moderated impacts so that, by the end of the period, in most cases impacts had peaked and were substantially lower than in previous decades** (Goklany 2007a, p. 133). In general, **long term environmental trends have not conformed to the notion that, sooner or later, technology will necessarily increase environmental impacts.** Moreover, **if one goes sufficiently far back into the historical record, e.g., for habitat converted to cropland, air pollution emissions or water related diseases, the initial trends will show environmental deterioration, seemingly validating the Neo-Malthusian view. But over time this interpretation fails, as the environmental impact is more or less halted** (e.g., cropland) **or even reversed** (air and water pollution) (Goklany 2007a). Such declines lend credence to the environmental transition hypothesis and indicate that, in effect, sooner or later technology no longer acts as a multiplier, but as a divisor for the environmental impact.

## **Impact turns the case**

## **Economic decline worsens poverty**

### **Growth reduces poverty and solves many of the harms of being poor**

**Ferrara 12**—forbes policy contributor [Peter, “Economic Growth, Not Redistribution, Most Benefits The Poor, Working People, And The Middle Class” 11/15/2012, <http://www.forbes.com/sites/peterferrara/2012/11/15/economic-growth-not-redistribution-most-benefits-the-poor-working-people-and-the-middle-class/>, accessed 7/16 ]RMT

Such sustained, **rapid economic growth is the ultimate solution to poverty**. It was **economic growth in the last century that reduced U.S. poverty from roughly 50% in 1900, and 30% in 1950, to 12.1% in 1969. Among blacks, poverty was reduced in the 20th century from 3 in 4 to 1 in 4 through economic growth. Child poverty of 40% in the early 1950s was also reduced by half. It was economic growth that made the elimination of child labor possible as well.** The **living standards of the poor in America today are equivalent to the living standards of the middle class 35 years ago, if not the middle class in Europe today.** With **sustained, vigorous economic growth, 35 years from now the lowest income Americans will live at least as well as the middle class of today.** If **real compensation growth for the poor can be sustained at just 2% a year, after just 20 years their real incomes will increase by 50%, and after 40 years their incomes will more than double.** If **pro-growth economic policies could raise that real compensation growth to 3% a year, after just 20 years their real incomes would double, and after 40 years it would triple.** That is the most effective anti-poverty program possible. Just imagine what 2100 will look like if we can keep this economic growth going. Physicist Michio Kaku gave us an indication of that in a March, 2012 interview in the Wall Street Journal, explaining, “Every 18 months, computer power doubles, so in eight years, a microchip will cost only a penny. Instead of one chip inside a desk top, we’ll have millions of chips in all of our possessions: furniture, cars, appliances, clothes. Chips will be so ubiquitous that we won’t say the word ‘computer.’” Kaku continued, “To comprehend the world we’re entering, consider another word that will disappear soon: ‘tumor.’ We will have DNA chips inside our toilet, which will sample some of our blood and urine and tell us if we have cancer maybe 10 years before a tumor forms.” He adds, “When you need to see a doctor, you’ll talk to a wall in your home, and an animated artificially intelligent doctor will appear. You’ll scan your body with a hand-held MRI machine, the ‘Robodoc’ will analyze the results, and you’ll receive a diagnosis that is 99% accurate.” Kaku further projected, “In this ‘augmented reality,’...the Internet will be in your contact lens. You will blink, and you will go online. That will change everything.” Kaku concludes, “If you could meet your grandkids as elderly citizens in the year 2100, you would view them as being, basically, Greek gods.” Just **maintaining the real, long term, U.S.economic growth rate of 3.2% from 1947 to 2007 would have doubled our GDP of today 4 times, meaning a GDP 16 times as large as today,** In that future, **the poor of the time will have the standard of living of the American middle class in 2065.** We will enjoy peace in our time, as **the American military will be so advanced and dominant that no one else will even try to spend enough on their military to even threaten or challenge** us. A world of **free trade resulting from this Pax Americana will spread prosperity throughout the now third world.**

### **Economic growth instrumental in reducing poverty**

**Economist 13** (“Not Always with Us.” The Economist. The Economist Newspaper, 01 June 2013. Web. 16 July 2014. <<http://www.economist.com/news/briefing/21578643-world-has-astonishing-chance-take-billion-people-out-extreme-poverty-2030-not>>. The Economist online offers authoritative insight and opinion on international news, politics, business, finance, science and technology. Fred).

**Growth Decreases Poverty** ¶ In 1990-2010 the driving force behind the reduction of worldwide poverty was growth. Over the past decade, developing countries have boosted their GDP about 6% a year—1.5 points more than in 1960-90. This happened despite the worst worldwide economic crisis since the 1930s. The three regions with the largest numbers of poor people all registered strong gains in GDP after the recession: at 8% a year in East Asia; 7% in South Asia; 5% in Africa. As a rough guide, every 1% increase in GDP per head reduces poverty by around 1.7%. ¶ GDP, though, is not necessarily the best measure of living standards and poverty reduction. It is usually better to look at household consumption based on surveys. Martin Ravallion, until recently the World Bank's head of research, took 900 such surveys in 125 developing countries. These show, he calculates, that consumption in developing countries has grown by just under 2% a year since 1980. But there has been a sharp increase since 2000. Before that, annual growth was 0.9%; after it, the rate leapt to 4.3%. ¶ Growth alone does not guarantee less poverty. Income distribution matters, too. One estimate found that two thirds of the fall in poverty was the result of growth; one-third came from greater equality. More equal countries cut poverty further and faster than unequal ones. Mr Ravallion reckons that a 1% increase in incomes cut poverty by 0.6% in the most unequal countries but by 4.3% in the most equal ones. The country that cut poverty the most was China, which in 1980 had the largest number of poor people anywhere. China saw a huge increase in income inequality—but even more growth. Between 1981 and 2010 it lifted a stunning 680m people out poverty—more than the entire current population of Latin America. This cut its poverty rate from 84% in 1980 to about 10% now. China alone accounts for around three quarters of the world's total decline in extreme poverty over the past 30 years. ¶ What is less often realised is that the recent story of poverty reduction has not been all about China. Between 1980 and 2000 growth in developing countries outside the Middle Kingdom was 0.6% a year. From 2000 to 2010 the rate rose to 3.8%—similar to the pattern if you include China. Mr Ravallion calculates that the acceleration in growth outside China since 2000 has cut the number of people in extreme poverty by 280m. ¶ Can this continue? And if it does, will it eradicate extreme poverty by 2030? To keep poverty reduction going, growth would have to be maintained at something like its current rate. Most forecasters do expect that to happen, though problems in Europe could spill over and damage the global economy. Such long-range forecasts are inevitably unreliable but two broad trends make an optimistic account somewhat plausible. One is that fast-growing developing countries are trading more with each other, making them more resilient than they used to be to shocks from the rich world. The other trend is that the two parts of the world with the largest numbers of poor people, India and Africa, are seeing an expansion of their working-age populations relative to the numbers of dependent children and old people. Even so, countries potentially face a problem of diminishing returns which could make progress at the second stage slower than at the first. ¶ There is no sign so far that returns are in fact diminishing. The poverty rate has fallen at a robust one percentage point a year over the past 30 years—and there has been no tailing off since 2005. But diminishing returns could occur for two reasons. When poverty within a country falls to very low levels, the few remaining poor are the hardest to reach. And, globally, as more people in countries such as China become middle class, poverty will become concentrated in fragile or failing states which have seen little poverty reduction to date. ¶ The sweetest spot ¶ In a study for the Brookings Institution, a think-tank in Washington, DC, Laurence Chandy, Natasha Ledlie and Veronika Penciakova look at the distribution of consumption (how many people consume \$1 a day, \$2 a day and so on) in developing countries. They show how it has changed over time, and how it might change in future. Plotted on a chart, the distribution looks like a fireman's helmet, with a peak in front and a long tail behind. In 1990 there were hardly any people with no income at all, then a peak just below the poverty line and then a long tail of richer folk extending off to the right (see chart 2). ¶ As countries get richer, the helmet moves to the right, reflecting the growth in household consumption. The faster the rate, the farther to the right the line moves, so the strong 4.3% annual growth in consumption since 2000 has pushed the line a good distance rightward. ¶ But the shape of the line also matters. The chart shows that in 1990 and 2000, the peak was positioned slightly to the left of the poverty line. As the shape moved to the right, it took a section of the peak to the other side of the poverty mark. This represents the surge of people who escaped poverty in 1990-2010. At the moment the world is at a unique sweet spot. More people are living at \$1.25 than at any other level of consumption. This means growth will result in more people moving across the international poverty line than across any other level of consumption. This is a big reason why growth is still producing big falls in poverty. ¶ But as countries continue to grow, and as the line continues to be pulled to the right, things start to change. Now, the peak begins to flatten. In 2010, according to Mr Chandy, there were 85m people living at or just below the poverty line (at a consumption level between \$1.20 and \$1.25 a day). If poverty falls at its trend rate, the number of people living at \$1.20-1.25 a day will also fall: to 56m in 2020 and 28m in 2030. ¶ This is good news, of course: there will be fewer poor people. But it means the rate of poverty reduction must slow down, even if consumption continues to grow fast. As Mr Chandy says, unless growth goes through the roof, "it is not possible to maintain the trend rate of poverty reduction with so many fewer individuals ready to cross the line."

## **Economic decline increases government instability**

**The lack of political instability directly correlates with economic instability and economic decline.**

**Ari Aisen and Francisco Jose Veiga, November 2011**

(IMF Working Paper, How does Political Instability Affect the Economy. *Ari Aisen and Francisco Jose Veiga*, November 2011

<https://www.imf.org/external/pubs/ft/wp/2011/wp1112.pdf> accessed tm 7/17))

The widespread phenomenon of political (and policy) instability in several countries across time and its negative effects on their economic performance has arisen the interest of several economists. As such, the profession produced an ample literature documenting the negative effects of political instability on a wide range of macroeconomic variables including, among others, GDP growth, private investment, and inflation. Alesina et al. (1996) use data on 113 countries from 1950 to 1982 to show that GDP growth is significantly lower in countries and time periods with a high propensity of government collapse. In a more recent paper, Jong-a-Pin (2009) also finds that higher degrees of political instability lead to lower economic growth.<sup>1</sup> As regards to private investment, Alesina and Perotti (1996) show that socio-political instability generates an uncertain politico-economic environment, raising risks and reducing investment.<sup>2</sup> Political instability also leads to higher inflation as shown in Aisen and Veiga (2006). Quite interestingly, the mechanisms at work to explain inflation in their paper resemble those affecting economic growth; namely that political instability shortens the horizons of governments, disrupting long term economic policies conducive to a better economic performance.

This paper revisits the relationship between political instability and GDP growth. This is because we believe that, so far, the profession was unable to tackle some fundamental questions behind the negative relationship between political instability and GDP growth. What are the main transmission channels from political instability to economic growth? How quantitatively important are the effects of political instability on the main drivers of growth, namely, total factor productivity and physical and human capital accumulation? This paper addresses these important questions providing estimates from panel data regressions using system-GMM3 on a dataset of up to 169 countries for the period 1960 to 2004. Our results are strikingly conclusive: in line with results previously documented, political instability reduces GDP growth rates significantly. An additional cabinet change (a new premier is named and/or 50 percent of cabinet posts are occupied by new ministers) reduces the annual real GDP per capita growth rate by 2.39 percentage points. This reduction is mainly due to the negative effects of political instability on total factor productivity growth, which account for more than half of the effects on GDP growth. Political instability also affects growth through physical and human capital accumulation, with the former having a slightly larger effect than the latter. These results go a long way to clearly understand why political instability is harmful to economic growth. It suggests that countries need to address political instability, dealing with its root causes and attempting to mitigate its effects on the quality and sustainability of economic policies engendering economic growth.

**Economic growth is necessary for greater investment. Average growth rate decreases with amplified cabinet change.**

Ari Aisen and Francisco Jose Veiga, November 2011  
(IMF Working Paper, How does Political Instability Affect the Economy. *Ari Aisen and Francisco Jose Veiga*, November 2011)

The results of system-GMM estimations on real GDP per capita growth using a sample comprising 169 countries, and nine consecutive and non-overlapping five-year periods from 1960 to 2004 are shown in Table 2. Since low economic growth may increase government instability (Alesina et al., 1996), our proxy for political instability, *Cabinet changes*, will be treated as endogenous. In fact, most of the other explanatory variables can also be affected by economic growth. Thus, it is more appropriate to treat all right-hand side variables as endogenous<sup>13</sup>. The results of the estimation of the baseline model are presented in column 1. The hypothesis that political instability negatively affects economic growth receives clear empirical support. *Cabinet Changes* is highly statistically significant and has the expected negative sign. The estimated coefficient implies that when there is an additional cabinet change per year, the annual growth rate decreases by 2.39 percentage points. Most of the results regarding the other explanatory variables also conform to our expectations. *Initial GDP per capita* has a negative coefficient, which is consistent with conditional income convergence across countries. *Investment and enrollment ratios*<sup>14</sup> have positive and statistically significant coefficients, indicating that greater investment and education promote growth. Finally, population growth has the expected negative coefficient, and *Trade (percent of GDP)* has the expected sign, but is not statistically significant.



## Economic decline worsens climate consequences

### **Growth key to solving climate – highest levels of growth correlate with most environmental protection**

Worstell, 11 – contributor @ Forbes (Tim, “Solving Climate Change” 8/10,  
<http://www.forbes.com/sites/timworstell/2011/08/10/solving-climate-change/>)/AH

**The IPCC process has just released their first update to these models since 2000.** The overview paper is here. I’m not going to delve into all of the details (for which readers will no doubt thank me) I just wanted to make a few general points with the use of a couple of their graphs. As a handy guide, “RCPnumber” should be interpreted thusly: the higher the number after the RCP the closer we are to boiling Flipper as the last humans fight on the desert shores of Antarctica. The lower the number the more we can say, “Phew, we dodged the problem”. More specifically, RCP2.6 means CO2 peaks out at 490 ppm and then declines. RCP8.5 means it gets to 1370 ppm and perhaps keeps going leading to that dolphin BBQ. Note please that I don’t have to believe these numbers, you don’t, no one has to believe any of this at all. However, we do need to realise that these are the numbers which are being fed into the climate change models (perhaps more accurately, that these are the numbers that will be) and thus produce those IPCC reports. Which means that anyone taking the outputs of those IPCC reports seriously needs to take these inputs seriously. My general points can be made quite simply with the aid of two of their charts. **We know very well that there’s a connection between economic growth and population** size. Richer countries on average have lower fertility rates so as the world becomes richer fewer children are born. So more economic growth leading to peaking and declining population really isn’t a surprise at all. However, look at that light green line. The RCP 2.6 one, the “whew, we dodged it” one. **The highest economic growth model leads to the lowest level of emissions considered. Less economic growth leads to higher emissions.** Note again that **these are not my assumptions. They are those of the IPCC process.** Which is something of a body blow to those telling us that we must cease economic growth if calamity is to be averted: the **very assumptions built into the whole proof that climate change is something we should worry about say exactly the opposite. Economic growth is the way out, not the problem.** By the way, the assumption there about the rate of economic growth, from a roughly \$50 trillion global economy in 2000 to a roughly \$300 trillion one in 2100. That’s not all that far off the growth rate we had in the 20th century. The second chart: This is how much energy we’re going to use and where we’re going to get it from. We need to be more parsimonious in our use of energy, yes. We need to use less of it per unit of GDP (which is known as “energy intensity” and their desired decrease in that isn’t far off what the advanced economies already manage) but we don’t actually need to use less of it overall. Less oil, yes, but we can near double our energy consumption and still hit that “we missed the problem” sweet spot. It’s also amusing to note what a small role for solar and wind power is necessary to hit that target. Again, I want to point out that these aren’t my assumptions, they’re not made up out of whole cloth by some denialist, these are the assumptions which the very scientists who tell us about climate change themselves think are the driving forces and likely outcomes. Which leads to a very interesting conclusion indeed. **We don’t have to stop economic growth at all, we can quite happily have around the same amount of it that we had in the 20th century.** So that’s a large number of the Green Miserablists shown to be wrong. We **don’t have to reduce or even severely limit our energy consumption: we just have to get the growth in our consumption from other than the usual sources. A large number of the Energy Miserablists shown to be wrong there too.** Or, to boil it right down, the **IPCC is telling us that the solution to climate change is economic growth and low-**

carbon energy generation. That's absolutely all we have to do. Or as I pointed out at book length recently, a globalised market economy with a carbon tax will do just fine.

## **Economic decline in period of climate change worsens consequences of climate**

**Koubi, Vally, et al. 2012**

("Climate variability, economic growth, and civil conflict." *Journal of Peace Research* 49.1 (2012): 113-127. Sage publications , AW)

Our argument starts with the assumption that climate change per se is unlikely to trigger civil conflict.

How- ever, it is possible that certain changes in rainfall and temperature, coupled with volatile weather patterns swinging between extremes, could reshape the produc- tive landscape of entire regions and exacerbate food, water, and energy scarcities, as envisaged in the tradi- tional resource scarcity (neo-Malthusian) model. Conse- quently, we argue that climatic changes, through their effects on economic growth, might induce competition among groups inside a state and thus increase the likeli- hood of conflict.

## **AT growth bad args**

## Transition wars

### **The attempt for transition would be a blood bath**

**Barnhizer 6** [David Barnhizer – Professor of Law at Cleveland State University, Summer 2006, ‘Waking from Sustainability's "Impossible Dream”,’ Georgetown International Environmental Law Review, Lexis]

**The scale of social needs, including the need for expanded productive activity, has grown so large that it cannot be shut off at all, and certainly not abruptly. It cannot even be ratcheted down** in any significant fashion **without producing serious harms to human societies and hundreds of millions of people. Even if it were possible to shift back to systems of local self-sufficiency, the consequences of the transition process would be catastrophic for many people and even deadly to the point of continual conflict, resource wars, increased poverty, and strife. What are needed are concrete, workable, and pragmatic strategies that produce effective and intelligently designed economic activity in specific contexts and, while seeking efficiency and conservation,** place economic and social justice high on a list of priorities. **n60 The imperative of economic growth applies not only to the needs and expectations of people in economically developed societies but also to people living in nations that are currently economically underdeveloped.** Opportunities must be created, jobs must be generated in huge numbers, and economic resources expanded to address the tragedies of poverty and inequality. Unfortunately, natural systems must be exploited to achieve this; we cannot return to Eden. The question is not how to achieve a static state but how to achieve what is needed to advance social justice while avoiding and mitigating the most destructive consequences of our behavior.

### **Elites prevent the shift.**

**Heinberg 4** – Member of the Core Faculty @ New College of California and writer on energy and resource issues, Richard, Power Down, p. 178-9

But this news pleases no one. If the Movement were to truly embrace it, the elites would pounce, **and it would be the easiest PR takedown in history. A few well-paid public relations firms would place some ads and op-ed pieces, and an “authoritative” study or two would be issued saying, in effect, “Nonsense! There is plenty for everyone; technology and the market will fix everything.” Broadcast commentators would pile on, polls would be taken, and the foolish notion that humans actually Face ecological constraints, just as all other organisms do, would be thoroughly discredited and banished from serious conversation. Imagine how the talk show hosts would rant: “Reduce our standard of living? Now ‘they’ are trying to take away your car!” — a car that will cease to run anyway when oil becomes prohibitively expensive. “Reduce population? Why that sounds like genocide!” — which, ironically, is exactly what the elites themselves are preparing for through their investments in nuclear bombs and genetic bio-weapons. And so the critical message is muted and truncated. The movement tailors its utterances for maximum public-relations effectiveness, just as the elites do. Politics trumps truth.**

## No mindset shift

### **De-development is worse for mindset shifting**

**Monbiot 9** [George Monbiot - columnist for The Guardian, has held visiting fellowships or professorships at the universities of Oxford (environmental policy), Bristol (philosophy), Keele (politics), Oxford Brookes (planning), and East London (environmental science, August 17, 2009, "Is there any point in fighting to stave off industrial apocalypse?," <http://www.guardian.co.uk/commentisfree/cif-green/2009/aug/17/environment-climate-change>]

From the second and third observations, this follows: **instead of gathering as free collectives of happy householders, survivors of this collapse will be subject to the will of people seeking to monopolise remaining resources. This will** is likely to **be imposed through violence**. Political accountability will be a distant memory. The chances of conserving any resource in these circumstances are approximately zero. **The human and ecological consequences of the first global collapse are likely to persist for many generations, perhaps for our species' remaining time on earth. To imagine that good could come of the involuntary failure of industrial civilisation is also to succumb to denial.** The answer to your question – **what will we learn** from this collapse? – is nothing. This is why, despite everything, I fight on. **I am not fighting to sustain economic growth. I am fighting to prevent both initial collapse and the repeated catastrophe that follows.** However faint the hopes of engineering a soft landing – an ordered and structured downsizing of the global economy – might be, we must keep this possibility alive. Perhaps we are both in denial: I, because I think the fight is still worth having; you, because you think it isn't.

## Transition fails

**Degrowth fails – doesn't reverse problems, is ambiguous, and won't be adopted**

**Van Den Bergh 10** [Jeroen C.J.M. Van Den Bergh – Research professor at UAB & affiliated with the Institute of Environmental Science & Technology and the Dept. of Economics & Economic History of Universidad Autònoma de Barcelona, May 21, 2010, “Environment versus growth — A criticism of “degrowth” and a plea for “a-growth”, [http://degrowth.org/wp-content/uploads/2011/05/van-den-bergh\\_degrowth-and-a-growth.pdf](http://degrowth.org/wp-content/uploads/2011/05/van-den-bergh_degrowth-and-a-growth.pdf)]

Five main insights follow from the assessment of degrowth interpretations and strategies. First, the many meanings of **degrowth** suggest it **is bound to remain an ambiguous concept which will create confusion rather than contribute to a clear and constructive debate about environmental policy**. Second, most **interpretations of degrowth** are not meaningful in the context of environmental aims, i.e. they **do not represent strategies which guarantee an effective reduction of environmental pressure or a transition to a sustainable economy**. Third, **degrowth is unlikely to receive much social and democratic-political support so that it will be an ineffective political strategy to reach environmental sustainability**. Fourth, **a-growth** (as defined in Section 3) **is a less ambiguous and — from the perspective of both environment and human well-being — a more sensible strategy to strive for**. Fifth, **the alternative to a degrowth strategy is simply a good policy package that includes environmental regulation and several other, complementary measures and institutional changes**. **Striving for political feasibility nationally and internationally is an important precondition for getting such a policy package implemented**. The new aim of a-growth, and the associated removal of the GDP indicator from policy and political debate and decision-making, are likely to increase the social and political acceptance of this policy package. **The main concern about degrowth as a primary or overarching goal to solve environmental problems is that it reflects a misinterpretation of the relevant causality. It suggests that degrowth, however interpreted, is a first step, necessary and perhaps sufficient, to reach environmental aims. Instead, one better would reverse the causality, and start with a safe environmental policy which then may or may not give rise to (some type of) degrowth**. Even if one might support GDP, consumption or work-time degrowth for reasons of equity or happiness, they cannot be defended as appropriate strategies to reach environmental aims. The reason is that they function at best as blunt, ineffective and inefficient instruments of environmental regulation. **A degrowth strategy gives much weight to the scale of the economy or consumption, and underestimates or even neglects the role of composition and technical change. In relation to consumption it also often reflects a belief in the effectiveness of voluntary, bottom-up solutions**. One additional belief that I have often encountered in debates with degrowth proponents is that environmental policies do not work, or will not be implemented, and that we therefore have to find solutions outside the standard environmental policy framework. This view and judgment I cannot share. **Without (standard) policies we certainly will not be able to solve the major global environmental problems**. Their global and externality nature requires that we strike international agreements to create an international level playing field which allows countries to implement regulatory policies that create the necessary incentives to alter¶ all behavior that contributes to the environmental problems. This is not enough, as

suggested in the previous section on a wider policy package, but it represents the core of any effective solution.

## **Collapse doesn't create a mindset shift -- increases resource competition and violence.**

**Monbiot 2009** (George Monbiot, columnist for the Guardian, has held visiting fellowships or professorships at the universities of Oxford (environmental policy), Bristol (philosophy), Keele (politics), Oxford Brookes (planning), and East London (environmental science), "Is there any Point in Fighting to stave off industrial apocalypse", 8/17/09 <http://www.guardian.co.uk/commentisfree/cif-green/2009/aug/17/environment-climate-change//Mkoo>)

From the first observation, this follows: even if you are hardened to the fate of humans, you can surely see that our species will not become extinct without causing the extinction of almost all others. However hard we fall, we will recover sufficiently to land another hammer blow on the biosphere. We will continue to do so until there is so little left that even Homo sapiens can no longer survive. This is the ecological destiny of a species possessed of outstanding intelligence, opposable thumbs and an ability to interpret and exploit almost every possible resource – in the absence of political restraint. From the second and third observations, this follows: instead of gathering as free collectives of happy householders, survivors of this collapse will be subject to the will of people seeking to monopolise remaining resources. This will is likely to be imposed through violence. Political accountability will be a distant memory. The chances of conserving any resource in these circumstances are approximately zero. The human and ecological consequences of the first global collapse are likely to persist for many generations, perhaps for our species' remaining time on earth. To imagine that good could come of the involuntary failure of industrial civilisation is also to succumb to denial.

**Impact Debate – Growth Bad/Economic  
Decline doesn't cause war**



## **Impact Debate**

## **Growth Bad – laundry list extensions**

**Unsustainable growth is the root cause of resource depletion, environmental collapse, and Third World poverty, and global military conflict.**

**Trainer 11** - Conjoint Lecturer in the School of Social Sciences, University of New South Wales, (Ted, “The radical implications of a zero growth economy”, Real-World Economics Review, issue no. 57, 2011, <http://www.paecon.net/PAEReview/issue57/Trainer57.pdf>) //RI

Thus **growth is a major cause of global problems.** This **“limits to growth” analysis is crucial if one is to understand the nature of the environmental problem, the Third World problem, resource depletion and armed conflict in the world.** Although there may also be other causal factors at work, all **these problems are directly and primarily due to the fact that there is far too much producing and consuming going on.** For instance, **we have an environment problem because far too many resources are being drawn out of nature and far too many wastes dumped back in, at rates technical advance cannot cut to sustainable levels. We have an impoverished and underdeveloped Third World because people in rich countries insist on taking most of the resources, including those in the Third World that should be being used by Third World people to meet their own needs. And how likely is it that we will ever have peace in the world if resources are very scarce and all cannot use them at the rate a few do now, yet all insist on getting richer and richer all the time without limit? If you insist on remaining affluent then you should arm yourselves heavily, you will need arms** if you want to continue to take far more than your fair share.

## **Economic collapse now good – environmental collapse and conflict**

**Barry, 08** president and founder of Ecological Internet, Economic Collapse and Global Ecology (Dr. Glen, ,1/14, Counter Currents, <http://www.countercurrents.org/barry140108.htm>)

**Given widespread failure to pursue policies sufficient to reverse deterioration of the biosphere and avoid ecological collapse, the best we can hope for may be that the growth-based economic system crashes sooner rather than later** Humanity and the Earth are faced with an enormous conundrum -- **sufficient climate policies enjoy political support only in times of rapid economic growth. Yet this growth is the primary factor driving greenhouse gas emissions and other environmental ills.** The **growth machine has pushed the planet well beyond its ecological carrying capacity, and unless constrained, can only lead to human extinction and an end to complex life. With every economic downturn, like the one now looming in the United States, it becomes more difficult and less likely that policy sufficient to ensure global ecological sustainability will be embraced.** This essay explores the possibility that **from a biocentric viewpoint of needs for long-term global ecological, economic and social sustainability; it would be better for the economic collapse to come now rather than later. Economic growth is a deadly disease upon the Earth, with capitalism as its most virulent strain.** Throw-away **consumption and explosive population growth are made possible by using up fossil fuels and destroying ecosystems.** Holiday shopping numbers are covered by media in the same breath as Arctic ice melt, ignoring their deep connection. Exponential **economic growth destroys ecosystems and pushes the biosphere closer to failure. Humanity has proven itself unwilling and unable to address climate change and other environmental threats with necessary haste and ambition.** Action on coal, forests, population, renewable energy and emission reductions could be taken now at net benefit to the economy. Yet, the losers -- primarily **fossil fuel industries** and their bought oligarchy -- **successfully resist futures not dependent upon their deadly products.** Perpetual **economic growth, and necessary climate and other ecological policies, are fundamentally incompatible.** Global **ecological sustainability depends critically upon establishing a steady state economy, whereby production is right-sized to not diminish natural capital.** Whole industries like coal and natural forest logging will be eliminated even as new opportunities emerge in solar energy and environmental restoration. This critical **transition to both economic and ecological sustainability is simply not happening on any scale. The challenge is how to carry out necessary environmental policies even as economic growth ends and consumption plunges.** The natural response is going to be liquidation of even more life-giving ecosystems, and jettisoning of climate policies, to vainly try to maintain high growth and personal consumption. We know that **humanity must reduce greenhouse gas emissions by at least 80% over coming decades.** How will this and other necessary climate mitigation strategies be maintained during years of economic downturns, resource wars, reasonable demands for equitable consumption, and frankly, the weather being more pleasant in some places? **If efforts to reduce emissions and move to a steady state economy fail; the collapse of ecological, economic and social systems is assured.** Bright greens take the continued existence of a habitable Earth with viable, sustainable populations of all species including humans as the ultimate truth and the meaning of life. Whether this is possible in a time of economic collapse is crucially dependent upon whether enough **ecosystems and resources remain post collapse to allow humanity to recover and**

reconstitute sustainable, relocalized societies. It may be better for the Earth and humanity's future that economic collapse comes sooner rather than later, while more ecosystems and opportunities to return to nature's fold exist. Economic collapse will be deeply wrenching -- part Great Depression, part African famine. There will be starvation and civil strife, and a long period of suffering and turmoil. Many will be killed as balance returns to the Earth. Most people have forgotten how to grow food and that their identity is more than what they own. Yet there is some justice, in that those who have lived most lightly upon the land will have an easier time of it, even as those super-consumers living in massive cities finally learn where their food comes from and that ecology is the meaning of life. Economic collapse now means humanity and the Earth ultimately survive to prosper again. Human suffering -- already the norm for many, but hitting the currently materially affluent -- is inevitable given the degree to which the planet's carrying capacity has been exceeded. We are a couple decades at most away from societal strife of a much greater magnitude as the Earth's biosphere fails. Humanity can take the bitter medicine now, and recover while emerging better for it; or our total collapse can be a final, fatal death swoon. A successful revolutionary response to imminent global ecosystem collapse would focus upon bringing down the Earth's industrial economy now. As society continues to fail miserably to implement necessary changes to allow creation to continue, maybe the best strategy to achieve global ecological sustainability is economic sabotage to hasten the day. It is more fragile than it looks. Humanity is a marvelous creation. Yet her current dilemma is unprecedented. It is not yet known whether she is able to adapt, at some expense to her comfort and short-term well-being, to ensure survival. If she can, all futures of economic, social and ecological collapse can be avoided. If not it is better from a long-term biocentric viewpoint that the economic growth machine collapse now, bringing forth the necessary change, and offering hope for a planetary and human revival. I wish no harm to anyone, and want desperately to avoid these prophecies foretold by ecological science. I speak for the Earth, for despite being the giver of life, her natural voice remains largely unheard over the tumult of the end of being.

## **Growth = totalitarian regimes module**

### **Rapid Economic growth promotes totalitarian regimes**

**Gassebner et al., Princeton university, 2007**

(Martin, "Extreme Bounds of Democracy", <http://www.princeton.edu/~pcglobal/conferences/globdem/papers/Gassebner-Lamla-Vreeland.pdf>)

In an early large-n study of democracy, Almond and Verba (1963) propose a cultural explanation of democracy. **Using survey-based research in five countries, they argue that a "participant" culture** (as opposed to a "subject" or "parochial" culture) **is required for democracy.** The "civic culture" argument is tested cross-nationally in the work of Inglehart (1988), who finds that **democracy is correlated with the percentage of people reporting high levels interpersonal trust, low levels of support for revolutionary change, and high levels of life satisfaction.** His findings are of course, disputed by Seligson (2002), who shows that **the correlation disappears when one controls for level of economic development.** Przeworski et al. (2000) test a full range of other cultural variables, finding that none has a robust relationship with democracy once one accounts for level of economic development. Economic explanations of democracy date back to Lipset (1959) who is often cited as the first "modernization theorist." Modernization Theory argues that as countries develop economically, social structures become too complex for authoritarian regimes to manage – technological change endows owners of capital with some autonomy and private information, complex labor processes require active cooperation rather than coercion, and civil society emerges. At some point in this process, dictatorship collapses and democracy emerges as the alternative. Huntington (1968) adds that sustainable democracy requires political development along with economic development, but basically agrees that as a dictatorship experiences economic development democratization becomes more likely. **Without political development, however, rapid economic development can also destabilize democracies.** Thus he proposes a "bell-shaped" pattern of stability of regimes with respect to economic development. In their expansive large-n study of democracy and development, Przeworski et al. (2000) thoroughly explore the relationship. They begin with the observation that the correlation between level of economic development and democracy is strong. They question, however, the process by which this correlation is driven. **They suggest, in contrast to modernization theorists, that this correlation is possible even if the emergence of democracy is completely random with respect to economic development.** The correlation may be driven instead by a relationship between economic development and the survival of democracy. This is in fact what their book argues. **The emergence of democracy has no relationship with level of economic development;** the correlation instead is entirely driven by the survival of democracy. In other work, Przeworski (2005: 253) argues that "Democracy prevails in developed societies because too much is at stake in turning against it." Conversely, in poor democracies, **"the value of becoming a dictator is greater and the accumulated cost of destroying capital stock is lower"** (Przeworski and Limongi, 1997: 166 fn. 1). It should be noted, however, that while Przeworski et al. (2000) show that transitions to democracy are not well predicted by economic development and survival of democracy is, the estimated effect of economic development on the transition to democracy is statistically significant in their specification.<sup>1</sup> We suspect (and show below) that it is not a robust relationship. Since the Przeworski et al. (2000) study, many large-n studies of democracy have been pursued – too many to adequately review here. We are in the process of collecting data from all available studies and we describe them briefly in the appendix. (Suggestions of data from studies we still need to collect would be greatly appreciated.) Given the interests of the particular audience for this conference, we continue by highlighting some specific studies. The Przeworski et al. (2000) study ignores the oil rich countries of the Middle East. As these scholars were originally interested in estimating the effect of regime on economic growth, they chose not to include oil rich countries, whose process of augmenting GDP per capita is much different from that of other countries. Nevertheless, these countries present a real challenge to the modernization theory argument that should be considered. The argument of Boix (2003) provides a compelling answer.<sup>2</sup> He argues that level of economic development, income distribution, and – importantly – asset specificity together impact the probability of the emergence of democracy. **Where asset specificity is high and the income distribution is highly skewed, such as in many oil-rich countries, the rich face severe redistributive consequences for allowing popular sovereignty, and they have no credible threat to flee the country taking their productive capacity with them. Thus, it is in their interest to pay high costs of repressing democracy, maintaining dictatorial rule.** If assets are not highly specific,

however, the rich have a credible exit threat. If the rich flee the country, taking the productive capacity along with them, they can severely harm the national economy. The credible threat restrains the redistributive demands of the poor and may make democracy possible even in countries with relatively low levels of economic development, such as India. Asset specificity aside, if redistributive demands diminish at higher levels of economic development, Boix argues that economic development should make democracy more likely both to emerge and to survive.

## **Failure to move towards democracy sacrifices billions of lives to genocide, lack of human rights, and mass murder**

Rudy **Rummel**, Professor Emeritus of Political Science, “Why Foster Global Freedom,” 2009, January 10. <http://democraticpeace.wordpress.com/2009/01/10/page/2/>

Today, **billions of human beings are still subject to impoverishment, exposure, starvation, disease, torture, rape, beatings, forced labor, genocide, mass murder, executions, deportations, political violence, and war. These billions live in fear for their lives**, and for those of their loved ones. **They have no human rights, no liberties.** These people are only pieces on a playing board for the armed thugs and gangs that oppress their nations, raping them, looting them, exploiting them, and murdering them. We hide the identity of the gangs—we sanctify them—with the benign concept of “government,” as in the “government” of Kim’s North Korea, Stalin’s Soviet Union, or Hitler’s Germany. **The gangs that control these so-called governments oppress whole nations under cover of international law.** They are like a gang that captures a group of hikers and then does with them what it wills, robbing all, torturing and murdering some because gang members don’t like them or they are “disobedient,” and raping others. Nonetheless, **the thugs that rule nations “govern” by the right of sovereignty: the community of nations explicitly grants them the right by international law to govern a nation when they show that they effectively control the national government**, and this right carries with it the promise that other nations will not intervene in their internal affairs. International law now recognizes that if these gangs go to extremes, such as massive ethnic cleansing or genocide, then the international community has a countervailing right to stop them. However, this area of international law is still developing, and in the current examples of Cuba, Burma, Iran, North Korea, Rwanda, Saudi Arabia, Sudan, and Syria, among others, the thugs still largely have their way with their victims. **This is unconscionable. The people of these countries, and all people everywhere have the right to freedom of speech, religion, organization, and a fair trial, among other rights, and one overarching right to be free subsumes all these civil and political rights.** This right overrules sovereignty, which is granted according to tradition based on a system of international treaties, not natural law. **Freedom, by contrast, is not something others grant.** It is a right due every human being. For too many intellectuals, however, it is not enough to point out that a people have a right to be free. They will counter by arguing that freedom is desirable, but first people must be made equal, given food to eat, work, and health care. Freedom must be limited as a means to good ends, such as the public welfare, prosperity, peace, ethnic unity, or national honor. These intellectuals also have been allowed to assume the moral high ground. Freedom, they tell us, empowers greed, barbaric competition, inefficiency, inequality, the debasement of morals, the weakening of ethnic or racial identity, and so on. Sometimes they are so persuasive that even reasonable people will accept their convoluted arguments. Need I mention the works of Marx and Lenin, for example, who provided “scientific” excuses for the tyranny of such thugs as Stalin, Mao, and Pol Pot? To be defensive about freedom in the face of such justifications is morally wrong-headed. No moral code or civil law allows that a gang leader and his followers can murder, torture, and repress some at will as long as the thugs provide others with a good life. But even were it accepted that under the cover of government authority, a ruler can murder and repress his people so long as it promotes human betterment, the burden of proof is on those who argue that therefore those people will be better off. There is no such proof. Quite the opposite: in the twentieth century, we have had the most costly and extensive tests of such arguments, involving billions of people. The Nazis, Italian fascists under Mussolini, Japanese militarists, and Chinese Nationalists under Chiang Kai-shek have tested fascist promises of a better life. Likewise, Lenin, Stalin, Mao, and Pol Pot have tested the utopian promises of communism, to mention the most prominent communist experiments; and Burma, Iraq, and Syria, among others, also have tested state socialism. **All these vast social experiments have failed, utterly and miserably, and they have done so at the vast human cost that has included global social upheaval, the displacement of millions, the impoverishment of billions, and the death of tens of millions from famine, extreme internal violence, and the most destructive wars**—not to mention the many hundreds of millions murdered outright. These social experiments have involved the mass murder of 262,000,000 Russians, Chinese, Cambodians, Poles, North Koreans, Cubans, Vietnamese, and others, such that were their souls to comprise a land of the dead it would be among the world’s top three in population. In sharp contrast, there are the arguments for freedom. Not only is a right certified in international law (e.g., the various human rights multinational conventions), but a supreme moral good in itself. The very fact of a people’s freedom creates a better life for all. Free people create a wealthy and prosperous society. When people are free to go about their own business, they put their ingenuity and creativity in the service of all. They search for ways to satisfy the needs, desires, and wants of others. The true utopia lies not in some state-sponsored tyranny, but the free market in goods, ideas, and services, whose operating principle is that success depends on satisfying others. Moreover, it is not by chance that: No democratically free people have suffered from mass famine. It is extraordinary, how little known this is. There are plenty of hunger projects and plans to increase food aid for the starving millions, all of which is good enough in the short run. A starving person will die before the people can kick out their rulers or make them reform their policies. Yet simply feeding the starving today is not enough. They also have to be fed tomorrow and every day thereafter. However, free these people from their rulers’ commands over their farming, and soon they will be able to feed themselves and others as well. There is an adage that applies to this: “Give a starving person a fish to eat and you feed him only for one day; teach him how to fish, and he feeds himself forever.” Yet teaching is no good alone, if people are not free to apply their new knowledge—yes, teach them how to fish, but also promote the freedom they need to do so. Surprisingly, the incredible economic productivity and wealth produced by a free people and their freedom from famines are not the only moral goods of freedom, nor, perhaps, even the most important moral goods. When people are free, they comprise a spontaneous society the characteristics of which strongly inhibit society-wide political violence. Freedom greatly reduces the possibility of revolutions, civil war, rebellions, guerrilla warfare, coups, violent riots, and the like. Most of the violence within nations occurs where thugs rule with absolute power. There is a continuum here: **The more power the rulers have, and the less free their people, the more internal violence these people**

**will suffer Surely that which protects people against internal violence, that which so saves human lives, is a moral good. And this is freedom Then there is mass democide, the most destructive means of ending human lives of any form of violence.**

Except in the case of the Nazi Holocaust of European Jews, few people know how murderous the dictators of this world have been, and could be. Virtually unknown are the shocking tens of millions murdered by Stalin and Mao, and the other millions wiped out by Pol Pot, Ho Chi Minh, Kim Il-sung, and their kind. Just omitting foreigners, who are most often murdered during a war, such thugs murdered about 161,000,000 of their own people from 1900 to 1987. Adding foreigners and including the whole twentieth century raises the toll they have killed to nearly the incredible aforementioned 262,000,000. Even now, in the twenty-first century, these mass murders still go on in Burma, Sudan, North Korea, and the Congo (DR), just to mention the most glaring examples. What is true about freedom and internal violence is also so for this mass democide:

**The more freedom a people have, the less likely their rulers will murder them. The more power the thugs have, the more likely they are to murder their people Could there be a greater moral good than to end or minimize such mass murder?**

## Growth = diseases extensions

### Growth causes diseases- escalates globally

#### Hamburg, '08

Margaret Hamburg is an FDA Commissioner. Senior Scientist Nuclear Threat Initiative. MD "Germs Go Global: Why Emerging Infectious Diseases Are a Threat to America", October 2008  
<http://healthyamericans.org/assets/files/GermsGoGlobal.pdf>

**Globalization**, the worldwide movement **toward economic**, financial, trade, and communications **integration**, has impacted public **health** significantly. **Technology and economic interdependence allow diseases to spread globally at rapid speeds**. Experts believe that the **increase in international travel and commerce**, including the increasingly global nature of food handling, processing, and sales contribute to the **spread** of emerging infectious **diseases**.<sup>47</sup> **Increased global trade** has also **brought more** and more people into contact with zoonosis -- **diseases that originated in animals** before jumping to humans. For example, in 2003, the monkeypox virus entered the U.S. through imported Gambian giant rats sold in the nation's under-regulated exotic pet trade. The rats infected pet prairie dogs, which passed the virus along to humans.<sup>48</sup> International **smuggling of birds, brought into the U.S.** without undergoing inspection and/or quarantine, is of particular concern to public health experts who worry that it **may be a pathway for** the H5N1 "**bird flu**" virus to enter the country. Lower cost and efficient means of **international transportation allow people to travel** to more remote places and potential **exposure to more** infectious **diseases**. And the close proximity of **passengers** on passenger planes, trains, and cruise ships **over the course** of many hours **puts people at risk for higher levels of exposure**. If a person contracts a disease abroad, their symptoms may not emerge until they return home, having exposed others to the infection during their travels. In addition, **planes and ships can themselves become breeding grounds for infectious diseases**. The 2002-2003 **SARS outbreak spread quickly around the globe due to international travel**. **SARS is caused by a new strain of coronavirus**, the same family of viruses that frequently cause the common cold. This contagious and sometimes fatal respiratory illness first appeared in China in November 2002. **Within 6 weeks**, SARS had **spread worldwide**, transmitted around the globe by unsuspecting travelers. According to CDC, **8,098 people were infected and 774 died of the disease**.<sup>49</sup> SARS represented the first severe, newly emergent infectious disease of the 21st century. **50 It illustrated just how quickly infection can spread in a highly mobile and interconnected world**. SARS was contained and controlled because public health authorities in the communities most affected mounted a rapid and effective response. SARS also demonstrated the economic consequences of an emerging infectious disease in closely interdependent and highly mobile world. Apart from the direct costs of intensive medical care and disease control interventions, SARS caused widespread social disruption and economic losses. Schools, hospitals, and some borders were closed and thousands of people were placed in quarantine. International travel to affected areas fell sharply by 50 - 70 percent. Hotel occupancy dropped by more than 60 percent. Businesses, particularly in tourism-related areas, failed. According to a study by Morgan Stanley, the Asia-Pacific region's economy lost nearly \$40 billion due to SARS.<sup>51</sup> The World Bank found that the East Asian region's GDP fell by 2 percent in the second quarter of 2003.<sup>52</sup> Toronto experienced a 13.4 percent drop in tourism in 2003.<sup>53</sup>

## Growth – collapse environment extensions

### **Economic growth is the principal driver of environmental decline.**

Speth, 2013 (James Gustave Speth, "Growth Fetish: Five Reasons Why Prioritizing Growth is Bad Policy," Huffington Post, September 20<sup>th</sup> 2013, [http://www.huffingtonpost.com/james-gustave-speth/growth-fetish-five-reason\\_b\\_4018166.html](http://www.huffingtonpost.com/james-gustave-speth/growth-fetish-five-reason_b_4018166.html), 7/17/14, LI

**Economic activity and its growth are the principal drivers of massive environmental decline.** In a remarkable passage of his environmental history of the twentieth century, *Something New Under the Sun*, historian J. R. McNeill writes that the "growth fetish" solidified its hold on imaginations and institutions in the twentieth century: "Communism aspired to become the universal creed of the twentieth century, but a more flexible and seductive religion succeeded where communism failed: the quest for economic growth. Capitalists, nationalists -- indeed almost everyone, communists included -- worshiped at this same altar because economic growth disguised a multitude of sins. ... Social, moral, and ecological ills were sustained in the interest of economic growth; indeed, adherents to the faith proposed that only more growth could resolve such ills. Economic growth became the indispensable ideology of the state nearly everywhere. **"The growth fetish, while on balance quite useful in a world with empty land, shoals of undisturbed fish, vast forests, and a robust ozone shield, helped create a more crowded and stressed one.** Despite the disappearance of ecological buffers and mounting real costs, ideological lock-in reigned in both capitalist and communist circles. ... The overarching priority of economic growth was easily the most important idea of the twentieth century." The relationship between economic gains and environmental losses is a close one, as McNeill notes. **The economy consumes natural resources (both renewable and nonrenewable resources), occupies the land, and releases pollutants.** As the economy has grown, so have resource use and pollutants of great variety. As Paul Ekins says in *Economic Growth and Environmental Sustainability*, **"the sacrifice of the environment to economic growth. . . has unquestionably been a feature of economic development at least since the birth of industrialism."** And so it remains.

### **Growth rapidly increases global warming and exacerbates poverty. Dedevelopment solves sustainability.**

**Victor 10** (Peter, Professor in Environmental Studies at York University where he teaches an undergraduate course in environmental management and graduate and undergraduate courses in ecological and environmental economics, *Nature*: Vol. 468, 11/18/2010, "Questioning economic growth" ND)

An alternative is to encourage growth in sectors of the economy that use fewer resources, such as the service sector. Such a strategy could buy some time, but not if it simply shifts the production of resource-intensive products and their related environmental burdens to other countries, as has been the pattern in recent years. **A third option is to limit growth itself. The battle against climate change illustrates the attractiveness of this strategy. To reduce greenhouse-gas emissions (GHG) by 80% over 50 years, an economy that increases its real gross domestic product (GDP) by 3% a year must reduce its emissions intensity -- tonnes of GHG per unit of GDP -- by an astonishing 6% a year. For an economy that does not grow, the annual cut would be a still very challenging 3.2%. The view that we should curb planetary impacts by reducing growth in richer countries is reinforced by several considerations.** First, **there is mounting evidence that this growth is largely unrelated to measures of happiness. Second, in recent decades, increasing inequality has accompanied much of this growth, leading to problems ranging from poor public health to social unrest.** Third, the prospects for real improvement in the developing world are likely to be diminished if developed countries continue to encroach on more ecological space. Removing economic growth as a major policy priority runs counter to the views of governments and many international agencies. **Many nations responded to the recent financial crisis with desperate measures to resume economic growth. Yet when we recognize how briefly economic growth has held such prominence in policy circles, dethroning it seems less improbable.** Regular estimates of GDP by governments date back only to the 1940s, and the measure was initially used in support of specific objectives, such as stimulating employment. **Only in the 1950s did economic growth become a policy priority in its own right<sup>6</sup>. Economists and other social scientists now need to map out functional economies in which growth is sidelined, and stability, resilience and wellbeing are the prime objectives, within**



**environmental and resource constraints.** Ecological economist Herman **Daly**, who has investigated and promoted a steady-state economic model for several decades, **has formulated a useful set of principles for limiting material use, including: the harvest of renewable resources should not exceed their regeneration rate; the rate of extraction of non-renewable resources should not exceed the rate of creation of renewable substitutes; and waste emissions should not exceed the environment's capacity to assimilate them.** To these we should add the protection of land and water to reduce competition among humans and other species. **Among the many successful applications of these principles is the creation of protected areas and green belts.** **Daly**, with theologian John Cobb, **also proposed an alternative measure of macro-economic success: the Index of Sustainable Economic Welfare (ISEW), incorporating environmental degradation, resource depletion and other factors.** Estimates of this index show a major divergence from GDP per person for many countries. In one study by environmental charity Friends of the Earth<sup>7</sup>, the gap between US GDP and the 'Genuine Progress Indicator' (GPI), calculated similarly to the ISEW, was particularly marked: whereas GDP per person rose from the 1970s, GPI actually declined (see 'Genuine progress?').

## **Rise of emerging markets harm energy and environmental issues- countries like China continue to grow and use carbon emissions- increasing warming**

### **Gordon 12**

Robert J Gordon- Gordon is a macroeconomist, specifically studies in unemployment, inflation, and both the long-run and cyclical aspects of labor productivity. "Is US Economic Growth Over? Faltering Innovation Confronts the Six Heads Winds" August 2012

Energy and environmental issues (headwind 4) are also related to the rise of the emerging markets. China and India contribute more to the growth of carbon emissions and to global warming than does the U.S. but are naturally reluctant to have their chance to leap into the ranks of the advanced nations set back by high carbon taxes. They argue with some justification that "no foreign power in 1900 told American steel mills to install expensive emissions-reducing devices, so why should we at the same stage of development be asked to do so?" Beijing's notoriously polluted air, at least so far, does not prevent San Francisco from enjoying sparkling skies but it does contribute to global warming.

## **Economic growth leads to increased industry, MORE POLLUTION**

**Tamazian and Rao, January 2010** (Artur and B. Bhaskara, faculty specializing in economics at the University of Santiago at Compostela, professor and researcher in macroeconomics at University at Western Sydney, "Do Economic, Financial and Institutional Developments Matter for Environmental Degradation? Evidence from Transitional Economies", ScienceDirect, 7/16/14, JW)

There are a number of studies that examine the link between environmental degradation and economic growth. **According to Meadows, Meadows, Randers, Behrens (1992), far from being a threat to the environment in the long-term, economic growth appears to be necessary to maintain and improve the environmental quality. However, there are growing concerns about the adverse environmental impacts of economic growth.** For example Grove's (1992) concerns have led to a rich stream of research on the notion of environmentally sustainable economic development. This in turn made Anderson (1992) to explore the tradeoff between economic growth and environmental quality. Following this work the dominant view that has emerged is that this tradeoff between economic growth and environmental quality is not invariant to policies. It is possible to mitigate greatly this tradeoff through appropriate policies (Antle and Heidebrink, 1995; Grossman and Krueger, 1995; Selden and Song, 1994; Shafik, 1994). This issue is particularly significant for the transitional countries, which aim to achieve higher economic growth rates face the danger of adopting economic policies that run contrary

to the objective of their long-term environmental sustainability. Kolstad and Krautkraemer (1993) point out the fact that there is a dynamic link between environment, resource use and economic activity. They argue that while resource use (especially energy sources) yields immediate economic benefits, this will have negative impact on the environment in the long run.¶ However, the net impact of economic development upon environmental quality seems to depend on the characteristics of different pollutants (Hettige, Lucas and Wheeler, 1992; Birdsall and Wheeler, 1992; Diwan and Shafik, 1992). For example, some air pollutants such as suspended particulate matter, sulfur dioxides, carbon monoxide and oxides of nitrogen, which have relatively significant health and environmental degradation effects, appear to take an inverted U-shaped relationship with economic development. Selden and Song (1994) have looked at various air pollutants like SO<sub>2</sub>, NO<sub>x</sub> and CO and find similar results related to EKC. Shafik and Bandyopadhyay (1992) show that the CO<sub>2</sub> emissions have been found to increase monotonically with per capita GDP. While in this article we strictly explore the existence of EKC, it is worth noting that Goldemberg (1998) argues that environment disasters may be prevented by following the past steps by the industrialized countries. The industrialized have incorporated modern and efficient technologies early in the development process. However, Panayotou (1997) found that the quality of both policies and institutions in a country can significantly reduce environmental degradation even if a country's income level is low. Higher future income levels are likely to speed up improvements to the environment. Policies such as more secure property rights under the rule of law and better enforcement of contracts and effective environmental regulations can help flatten the EKC and reduce the environmental cost of higher economic growth.

## **Infinite industrial growth leads to ecocide – only a shift to green and steady growth solves**

**Barry, 12**

(Glen, President and Founder of Ecological Internet, Ph.D. in Land Resources from the University of Wisconsin, "Human Family's Ecocidal Death Wish," 1/31/12, <http://www.countercurrents.org/barry310112.htm>, Tashma)

The ecological foundation of being is unraveling before our very eyes. **Without ecosystems there is no life.** Fiercely loving Earth is the answer. **Let's sustain global ecology together like our shared survival and abundance depends upon it.** And while we set out using classic civil disobedience tactics, let's not dismiss out of hand any obstruction, uncivil disobedience, sabotage and targeted insurgency tactics - that are non-terrorist - and that may be necessary to achieve global ecological sustainability. The human family's shared survival depends upon passionately defending Earth using all means necessary. **Earth's ecosystems are collapsing under the burden of human growth, destroying our one shared biosphere that makes life possible. Industrial growth - frantically destroying ecosystems to feed insatiable, ever-growing appetites - is an aberration, a mistake, a disease.** If left untreated, this will be the end of the human family, all life, and Earth's very being. **Infinite economic growth at the expense of ecosystems is impossible, and seeking endless and inequitable growth in consumption and population can only lead to collapse and massive die-off. Humanity's last best chance to justly and equitably sustain a livable planet is to protect and restore ecosystems, end fossil fuels, and a people's power Earth revolution to utterly destroy the ecocidal industrial growth machine.** We are all bloody fools to tolerate and not immediately overthrow a violently ecocidal system that is killing us all. If we all understood the implications of global ecosystem collapse, we would go now, together, and slay the global growth machine. It is too late to escape profound ecological decline, yet complete disastrous social and ecological collapse - and possible end to most or all life - may yet be avoided. **Sustaining ecology must become society's central organizing principle or humans and all species face horrendous death. Globally it is time for radical change to simply survive converging ecology, food, war, water, inequity, population, climate, jobs, ocean, and extinction crises.**

It is deeply troubling most "environmentalists" deny the severity of ecosystem collapse, rejecting out of hand revolutionary measures sufficient to sustain ecology. Earth is dying a death of a billion lashes as ecosystems are liquidated for consumption as if nature has no worth. **80% of old forests are gone, 50% of top soil, 90% of big ocean fish, bee populations are collapsing, we are undergoing abrupt climate change, and two billion are hungry and thirsty - to say nothing of acidic and dead oceans, nitrogen pollution, fracking and tar sands, extinction, desertification, water scarcity, pervasive toxics, and how all these ecological crises interact and reinforce each other.** Yes, you read this right - EARTH IS DYING - not that humans are going extinct, but Earth will recover. A whole body of global change and ecology science and intuition indicates Earth is well past its carrying capacity and planetary boundaries, that enough ecosystems have been lost, diminished, and changed forever, that the biogeochemical process that make life possible are failing. We face an unprecedented planetary ecological emergency.

## Growth kills the environment

### Barry, 08

[Dr. Glen Barry, President and Founder of Ecological Internet, an online portal for the global environmental movement, Ph.D. in Land Resources from the University of Wisconsin-Madison, M.S. in Conservation Biology and Sustainable Development from the University of Wisconsin-Madison, and B.A. in Political Science from Marquette University, 2008, "Economic Collapse And Global Ecology," Earth Meanders, January 14th, Available Online at <http://www.countercurrents.org/barry140108.htm>]

Humanity and the Earth are faced with an enormous conundrum -- sufficient climate policies enjoy political support only in times of rapid economic growth. Yet this growth is the primary factor driving greenhouse gas emissions and other environmental ills. The growth machine has pushed the planet well beyond its ecological carrying capacity, and unless constrained, can only lead to human extinction and an end to complex life.

With every economic downturn, like the one now looming in the United States, it becomes more difficult and less likely that policy sufficient to ensure global ecological sustainability will be embraced. This essay explores the possibility that from a biocentric viewpoint of needs for long-term global ecological, economic and social sustainability; it would be better for the economic collapse to come now rather than later.

Economic growth is a deadly disease upon the Earth, with capitalism as its most virulent strain. Throw-away consumption and explosive population growth are made possible by using up fossil fuels and destroying ecosystems. Holiday shopping numbers are covered by media in the same breath as Arctic ice melt, ignoring their deep connection. Exponential economic growth destroys ecosystems and pushes the biosphere closer to failure

## Growth = resource scarcity Accelerating fast growth and consumption causes resource wars

### Trainer 11

(Ted, is Senior Lecturer, School of Social Work, University of New South Wales (Australia); lecturer and author of books regarding the transition to a sustainable society. Trainer is the organizer of "The Simpler Way: Analyses of global problems and the sustainable alternative society" June 1/11 "The Simpler Way perspective on the global predicament" <http://ukiahcommunityblog.wordpress.com/2011/06/01/ted-trainer-the-simpler-way-perspective-on-the-global-predicament/>/// CG

**Conflict and war are inevitable if all aspire to rich world rates of consumption, and if all countries insist on growth on a planet with limited and now rapidly dwindling resources. Rich countries must support repressive regimes willing to keep their economies to the policies that enable our corporations to ship out cheap resources, use Third World land for export crops, exploit cheap labour etc. we must be ready to invade and run countries that threaten to follow policies contrary to "our interests". Our rich world "living standards" could not be as high as they are if a great deal of**

**repression and violence was not taking place**, and rich countries contribute significantly to this. **If we are determined to remain affluent we should remain heavily armed!**

## Growth – resource scarcity module

### Resource scarcity causes instability - wars cause nuclear war and extinction

#### Woolridge 9

(Frosty, Former Officer – US Army Medical Service Corps, “America Galloping Toward Its Greatest Crisis in the 21<sup>st</sup> Century”, The Examiner, 5-22, <http://www.examiner.com/examiner/x-3515-Denver-Political-Issues-Examiner~y2009m5d22-America-galloping-toward-its-greatest-crisis-in-the-21st-century>)

“It is clear that most politicians and most citizens do not recognize that returning to **“more of the same” is a recipe for promoting the first collapse of a global civilization**. The required changes in energy technology, which would benefit not only the environment but also national security, public health, and the economy, would demand a World War II type mobilization -- and even that might not prevent a global climate disaster. Without transitioning away from use of fossil fuels, humanity will move further into an era of resource wars (remember, Africom has been added to the Pentagon’s structure -- and China has noticed), clearly with intent to protect US “interests” in petroleum reserves. **The consequences of more resource wars**, many likely triggered over water supplies stressed by climate disruption, **are likely to include increased unrest in poor nations, a proliferation of weapons of mass destruction, widening inequity** within and between nations, **and** in the worst (and not unlikely) case, **a nuclear war ending civilization**.

### Western economic growth increases resource scarcity and food shortages

#### Hueting 8

(Roefie, Dutch economist, former Head of the Department for Environmental Statistics of Statistics Netherlands, December 2008, Degrowth Conference, “WHY ENVIRONMENTAL SUSTAINABILITY CAN MOST PROBABLY NOT BE ATTAINED WITH GROWING PRODUCTION,” <http://www.sni-hueting.info/EN/Publications/2008-04-18-DeGrowthParis.pdf>, ND)

There are several regions in developing countries today where **desire for production in the short term over production that can be sustained in the long term already has led to production levels that are most probably much lower than sustainable levels**. This should be a warning to change priority away from production growth and towards safeguarding the environment if one wants environmental sustainability. Thus **deforestation has contributed to flooding, causing loss of harvests, houses and infrastructure, and to erosion leading to loss of soil**; see UNEP [23]. **Restoration of the damage constitutes costs and consequently a decrease in production. Deforestation has also caused reductions in local rainfall, thus contributing to drought**; see Silveira and Sternberg [24]. Overgrazing and salination have led to decreases in agricultural yield; see UNEP [23]. **Overfishing and dynamiting coral reefs have led to lower fish catches; see UNEP [23]. These developments have partly been caused by companies from rich countries. There are several regions in developing countries today where desire for production in the short term over production that can be sustained in the long term already has led to production levels that are most probably much lower than sustainable levels. This should be a warning to change priority away from production growth and towards safeguarding the environment** if one wants environmental sustainability. Thus **deforestation has contributed to flooding, causing loss of harvests, houses and infrastructure, and to erosion leading to loss of soil**; see UNEP [23]. **Restoration of the damage constitutes costs and consequently a decrease in production. Deforestation has also caused reductions in local rainfall, thus contributing to drought**; see Silveira and Sternberg [24]. **Overgrazing and salination have led to decreases in agricultural yield**; see UNEP [23]. **Overfishing and dynamiting coral reefs have led to lower fish catches**; see UNEP [23]. **These developments have partly been caused by companies from rich countries.**

## Growth = poverty module

**Growth makes poverty, ecological destruction, and conflict inevitable-- transitioning away from accelerated consumption is a necessary moral action.**

**Trainer 10**- Senior Lecturer in Sociology at the School of Social Work, University of New South Wales. (Ted, "THE LIMITS TO GROWTH PERSPECTIVE: A SUMMARY" 10/20/10, <http://socialsciences.arts.unsw.edu.au/tsw/Limits.Shrt.html>)/AP

**Our way of life is grossly unsustainable. Our levels of production and consumption are far too high. We can only achieve them because we few in rich countries are grabbing most of the resources produced and therefore depriving most of the world's people of a fair share, and because we are depleting stocks faster than they can regenerate. Because we consume so much we are rapidly using up resources and causing huge ecological damage.** It would be impossible for all the world's people to rise to our rich world per capita levels of consumption. **Most people have no idea how far we are beyond sustainable levels.** Although present levels of production, consumption, resource use and environmental impact are unsustainable we are obsessed with economic growth, i.e., with increasing production and consumption, as much as possible and without limit! **Most of the major global problems we face, especially environment, Third World poverty, conflict and social breakdown are primarily due to this limits problem;** i.e., to over-consumption. (This does not mean over-population is not a serious problem.) Following are some of the main facts and arguments that support the limits to growth position. · **Rich countries, with about one-fifth of the world's people, are consuming about three quarters of the world's resource production.** Our per capita consumption is about 15-20 times that of the poorest half of the world's people. · **World population will probably stabilise around 9 billion, somewhere after 2060. If all those people were to have present Australian per capita resource consumption, then rates of production of resources would have to be 5 to 10 times as great as they are now.** If we tried to rise to those levels of resource output we would completely exhaust all probably recoverable resources of coal, oil, natural gas, tar sand oil, shale oil and uranium (assuming the present "burner" reactors) well before 2050. We would also have exhausted potentially recoverable resources for one third of the mineral items by then. · **Petroleum is especially limited. World oil supply will probably peak between 2005 and 2010.** · **If all 9 billion people were to use timber at the rich world per capita rate we would need 3.5 times the world's present forest area.** · **If all 9 billion were to have a US diet, which takes about .5 ha of land to produce, we would need 4.5 billion ha of food producing land. But there is only 1.4 billion ha of cropland in use today and this is likely to decrease.** · **Recent "Footprint" analysis estimates that it takes about 8 ha of productive land to provide water, energy settlement area and food for one person living in an Australian world city. So if 9 billion people were to live as we do in rich world cities we would need about 72 billion ha of productive land. But that is 10 times all the productive land on the planet.** (Note that a number of other factors could be added to the footprint calculation, such as the land needed to absorb pollution.) Even though only one-fifth of the world's people are resource-affluent, we are using resources at rate that would take 1.4 planet earths to provide sustainably, (because we are consuming stocks such as forests faster than they can reproduce.) · **The biological diversity and resilience of the planet is deteriorating alarmingly. There are serious problems of water, food scarcity, forest and soil loss, decline of fish stocks, loss of coral reefs and tropical forests and mangroves and grasslands. We are heading into an era of massive species extinction.** The cause of these problems is the fact that humans are taking so much from nature and dumping so many wastes back into nature. · **It will probably soon be generally accepted that we must totally eliminate all CO2 emissions to the atmosphere by 2050. (Hansen, 2008, Meinshausen et al, 2009.) There is a strong case that it will not be possible to do this while maintaining consumer-capitalist society. Firstly it will not be possible to burn coal and sequester the resulting CO2 because only 80-90% of it can be captured for storage, and because the 50% of emissions from non-stationary sources cannot be captured. Secondly there is a strong case that it will not be possible to substitute alternative energy sources for carbon emitting fuels on the scale required. (Trainer, 2008.) These are some of the main limits to growth arguments which lead to the conclusion that there is no possibility of all people rising to the living standards we take for granted today in rich countries. We can only live like this because we are taking and using up most of the world's scarce resources, preventing most of the world's people from having anything like a fair share, and depleting the planet's ecological capital.** **Therefore we cannot morally endorse our affluent way of life. We must accept the need to move to far simpler and less resource-expensive ways.**



## **Growth = war extensions**

### **Probability – growth makes miscalculation much more likely**

**Boehmer, 2010** (Charles R., Associate Professor of Political Science at the University of Texas El Paso, “Economic Growth and violent international conflict: 1875-1999,” Defence and Peace Economics, Volume 21, Issue 3, June)

The point here is to make it clear that war need not be a result of economic growth but that when growth does contribute to interstate violence it does so by serving as a catalyst of willingness against a backdrop of opportunities. Chinese leaders may be less likely to back away from violent interstate conflict if a crisis occurs during a period of economic growth than they would before economic growth, and this risk is higher for China because its major power status and region provide more opportunities relative to most other states. Based on the rationale above, I do not predict that economic growth makes it more likely that states will initiate militarized conflicts with other states, or that it increases their overall conflict propensity. Economic growth appears dangerous in those situations where states are already involved in a conflict by making it more likely that a state will reciprocate or escalate conflicts. Considering that war is a suboptimal outcome (Gartzke, 1999), states would not risk escalating conflicts to violence or war if they have reason to believe that they may lose. Hubris may lead states into conflicts that turn deadly by providing an increased willingness to fight or even distorting and inflating leaders’ perception of state strength. States often march off to war thinking that the war will be short and that their side will prevail (Blainey, 1988); I suspect economic growth increases this resolve to stand against challenges from other states and to escalate crises.

### **Economic growth makes conflict escalation more likely -- increases resolve of leaders. Boehmer, ‘10**

[Charles, professor of political science at the University of Texas – El Paso and Ph.D. in Political Science from Pennsylvania State University, “Economic Growth and Violent International Conflict: 1875-1999,” Defence and Peace Economics, June, Vol. 21, Issue 3, pg. 249-268]

The theory set forth earlier theorizes that economic growth increases perceptions of state strength, increasing the likelihood of violent interstate conflicts. Economic growth appears to increase the resolve of leaders to stand against challenges and the willingness to escalate disputes. A non-random pattern exists where higher rates of GDP growth over multiple years are positively and significantly related to the most severe international conflicts, whereas this is not true for overall conflict initiations. Moreover, growth of military expenditures, as a measure of the war chest proposition, does not offer any explanation for violent interstate conflicts. This is not to say that growth of military expenditures never has any effect on the occurrence of war, although such a link is not generally true in the aggregate using a large sample of states. In comparison, higher rates of economic growth are significantly related to violent interstate conflicts in the aggregate. States with growing economies are more apt to reciprocate military challenges by other states and become involved in violent interstate conflicts. The results also show that theories from the Crisis-Scarcity perspective lack explanatory power linking GDP growth rates to war at the state level of analysis. This is not to say that such theories completely lack explanatory power in general, but more particularly that they cannot directly link economic growth rates to state behavior in violent interstate conflicts. In contrast, theories of diversionary conflict may well hold some explanatory power, although not regarding GDP growth in a general test of states from all regions of the world across time. Perhaps diversionary theory better explains state behaviors short of war, where the costs of externalizing domestic tensions do not become too costly, or in relation to the foreign policies of particular countries. In many circumstances, engaging in a war to divert attention away from domestic conditions would seemingly exacerbate domestic crisis conditions unless the chances of victory were practically assured. Nonetheless, this study does show that domestic conflict is associated with interstate conflict. If diversionary conflict theory has any traction as an economic explanation of violent interstate conflicts, it may require the study of other explanatory variables besides overall GDP growth rates, such as unemployment or inflation rates. The contribution of this article has been to examine propositions about economic growth in a global study. Most existing studies on this topic focus on only the United States, samples of



**countries that are more developed on average** (due to data availability in the past), **or are based on historical information and not economic GDP data**. While I have shown that there is no strong evidence linking military expenditures to violent interstate conflicts at the state level of analysis, much of the remaining Growth-as-Catalyst perspective is grounded in propositions that are not directly germane to questions about state conflict behavior, such as those linking state behavior to long-cycles, or those that remain at the systemic level. What answer remains linking economic growth to war once we eliminate military expenditures as an explanation? Considering that the concept of foreign policy mood is difficult to identify and measure, and that the bulk of the literature relies solely on the American historical experience, I do not rely on that concept. It is still possible that such moods affect some decision-makers. Instead, similar to Blainey, I find that **economic growth, when sustained over a stretch of years, has its strongest effect on states once they find themselves in an international crisis**. The results of this study suggest that **states** such as China, **which have a higher level of opportunity to become involved in violent interstate conflicts due to their capabilities, geographic location, history of conflict**, and so on, **should also have a higher willingness to fight after enjoying multiple years of recent economic growth**. One does not have to assume that an aggressive China will emerge from growth. If **conflicts** do present themselves, then China **may be more likely to escalate a war given its recent national performance**.

## Growth makes wars inevitable - only decreasing growth to sustainable levels solve

**Trainer 10**- Senior Lecturer in Sociology at the School of Social Work, University of New South Wales. (Ted, "GLOBAL PEACE AND CONFLICT" 10/20/10, <http://socialsciences.arts.unsw.edu.au/tsw/PEACE.htm>)/AP

Throughout history conflict and war have **on earth by 2070 were to have the present rich world lifestyle and "footprint" we would need about 12 times the area of productive land that exists on the entire planet**. Secondly if we were to cut greenhouse gas emissions sufficiently to prevent the carbon content of the atmosphere from increasing any more world per capita energy consumption would have to be cut to about one-eighteenth of its **present amount** **If all 9 billion people likely by 2070 were to have the present rich world per capita resource consumption, resource production would have to be about 8 times the present rate. These multiples underline the magnitude of the overshoot. Sustainability will require enormous reductions in the volume of rich world production and consumption**. Yet its supreme goal is economic growth, i.e., to increase the levels of production and consumption and GDP, constantly, rapidly and without any limit. That the absurdity of this is never recognised in conventional economic and political circles defies understanding. **If we in rich countries average 3% economic growth to 2070 and by then all the world's people had risen to the "living standards' we would have by then, the total world economic** mostly been **caused by the determination to take the resources of others,** or to take more than a fair share of the available resources. The armed conflicts in the world today are mostly explicable in these terms. It is not possible to understand the problem of peace and war in the world today if we do not connect it to the taken for granted affluence of rich countries. **Our high "living standards" in rich countries would not be possible if we were not getting far more than our fair share of the world's resources. The global economy is massively unjust; it increasingly allocates most of the world's wealth to the rich few. This is not possible without a) the deprivation of the Third World, because most of their resources are flowing to th** **and b) armed conflict, because the situation cannot be maintained without the use of force and violence.** **e rich countries,** If we insist on remaining as affluent as we are we will have to support repressive regimes and remain heavily armed and ready to use force to preserve our access to more than our fair share of the world's wealth. **CONSIDER OUR SITUATION · Resources are scarce and many are being depleted at a rapid rate. · Rich countries are heavily and increasingly dependent on imports for their resources and energy. We have only about 15% of the world's population but we get about 80% of resources produced. · Thus the distribution of world resource use is extremely unjust; a few rich countries are getting most of them, through the normal operation of the**

global market economy. If the already-rich countries insist on becoming even richer the distributions will become even worse. · Many of the resources the rich countries consume are taken from poor countries through normal economic processes which seriously deprive the majority of the world's people. For example much of the best Third World land grows crops to export, not to feed hungry local people. · World population will probably reach 9+ billion somewhere after 2060, so there are likely to be 1.5 times as many people demanding resources as there are now. · Land available for agriculture might not increase at all, because the rate at which it is being eroded and otherwise lost to production. Water resources, fish and forests are rapidly becoming more scarce. There will be much greater demand for these biological resources in the near future. However the most serious problems are probably going to be set by the peaking of petroleum supply, possibly between 2005 and 2010. (See <http://socialwork.arts.unsw.edu.au/tsw/D08ThePetroleumSit.html>) · If all the people the world will probably have by 2060 were to have the per capita resource consumption that people in rich countries average now, demand for resources would be about 8 times as great as it is now. ...and everyone, including even people in the richest countries, is obsessed with increasing living standards, economic output, production and consumption and affluence as fast as possible and without end! The inescapable conclusion:- While all parties remain dedicated to greater and greater affluence regardless of how rich they already are, and there are nowhere near enough resources to enable all to be as affluent as the rich are now, there can be no outcome other than increasing competition and conflict between nations for resources and markets. In other words, global peace is not possible unless there is movement towards a society in which we can all live well on far lower per capita resource use rates than at present.

## Growth = water shortages/wars extensions

**Fast and unsustainable growth ensure water shortages and conflicts – steady growth solves**

**Speth, 8** – Rhodes Scholar @ Oxford University, Chairman of Council on Environmental Quality for Executive Office, Founder of World Resources Institute (Think-Tank), Led the Western Hemisphere Dialogue on Environment and Development, Administrator of United Nations Development Program, Dean of Yale School of Forestry and Environmental Studies, Leader of the President's Task Force on Global Resources and the Environment, Holds multiple awards—National Wildlife Federation's Recourse Defense Award and Lifetime Achievement Award of Environmental Law Institute, and Blue Planet Prize [James, "The Bridge at the Edge of the World"]

It has been said that there are alternative sources of energy, **but there are no alternatives to water. There are several dimensions to what has correctly been called the world water crisis.**<sup>40</sup> First, **there is the crisis of natural watercourses and their attendant wetlands. No natural areas have been as degraded by human activities as freshwater systems. Natural water courses** and the vibrant life associated with them **have been extensively affected by dams, dikes, diversions, stream channelization, wetland filling and** other modifications, and, of course, **pollution.** Six percent of the world's major river basins have been severely or moderately fragmented by dams or other construction. Since 1950 the number of large dams has increased from 5,700 worldwide to more than 41,000. Much of this activity is done to secure access to the water, but **power production, flood control, navigation, and land reclamation have also been important factors.** As freshwater is diverted from natural sources, ecosystems dependent on that water suffer, including aquatic systems, wetlands, and forests. **About half the world's wetlands have been lost, and more than a fifth of known freshwater species have already been driven to extinction.**<sup>41</sup> The second crisis is the crisis of freshwater supply. **Human demand for water climbed sixfold in the twentieth century, and the trend continues today. Humanity now withdraws slightly over half of accessible freshwater, and water withdrawals could climb to 70 percent by 2025.**<sup>42</sup> Meeting the world's demands for freshwater is proving problematic. About 40 percent of the world's people already live in countries that are classified as "water stressed," meaning that already 20 to 40 percent of available freshwater is being used by human societies. **Projections indicate that the percentage of people living in water-stressed countries could rise to 65 percent by 2025.**<sup>43</sup> **A large portion of freshwater withdrawals, about 70 percent, goes to agriculture.** Since 1960, acreage under irrigation has more than doubled. A special problem is occurring in India, China, and elsewhere in Asia where tens of millions of tube wells are depleting "fossil" ground waters. The New Scientist reports that "hundreds of millions of Indians may see their land turned to desert."<sup>44</sup> Overall, **according to a study by top water specialists from around the world, world demand for water could double by 2050.**<sup>45</sup> "At the worst," the New York Times reported, **"a deepening water crisis would fuel violent conflicts,** dry up rivers and increase groundwater pollution.... It would also force the rural poor to clear ever-more grasslands and forests to grow food and leave many more people hungry."<sup>46</sup> Last, there is the crisis of pollution. **Pollutants of all types are discharged into the world's waters in enormous quantities, reducing the capacities of bodies of water to support life in the water and to support human communities.** Contamination denies a large portion of the world's population access to clean water supplies. **About a billion people, a fifth of the world's population, lack clean drinking water;** 40 percent lack sanitary services. The World Health Organization calculates that each year about 1.6 million children die from diseases caused by unsafe drinking water and lack of water for sanitation and hygiene.<sup>47</sup> Water supply issues will become increasingly prevalent in the United States. Freshwater withdrawals per capita from surface and ground waters in the United States are twice that of the OECD (Organisation for Economic Co-operation and Development) as a whole. The Environmental Protection Agency estimates that **if current American water use remains constant at a hundred gallons per person per day, thirty-six states will face water shortages by 2013.** As a result, humanity's "first need" will soon be privatized. Investors are moving into a water related market that is estimated to be worth at least \$15 billion in the United States by 2010. "Water is a growth driver for as long and as far as the eye can see," a Goldman Sachs water analyst told the New York Times in 2006.<sup>48</sup>

## **NO your impact does not turn the case**

### **Economic decline does not cause war**

**Barnett '9** (Thomas P.M. Barnett, senior managing director of Enterra Solutions LLC, "The New Rules: Security Remains Stable Amid Financial Crisis," 8/25/2009)

**When the global financial crisis struck roughly a year ago, the blogosphere was ablaze with all sorts of scary predictions of, and commentary regarding, ensuing conflict and wars -- a rerun of the Great Depression leading to world war, as it were. Now, as global economic news brightens and recovery -- surprisingly led by China and emerging markets -- is the talk of the day, it's interesting to look back over the past year and realize how globalization's first truly worldwide recession has had virtually no impact whatsoever on the international security landscape. None of the more than three-dozen ongoing conflicts listed by GlobalSecurity.org can be clearly attributed to the global recession. Indeed, the last new entry (civil conflict between Hamas and Fatah in the Palestine) predates the economic crisis by a year, and three quarters of the chronic struggles began in the last century. Ditto for the 15 low-intensity conflicts listed by Wikipedia (where the latest entry is the Mexican "drug war" begun in 2006). Certainly, the Russia-Georgia conflict last August was specifically timed, but by most accounts the opening ceremony of the Beijing Olympics was the most important external trigger (followed by the U.S. presidential campaign) for that sudden spike in an almost two-decade long struggle between Georgia and its two breakaway regions. Looking over the various databases, then, we see a most familiar picture: the usual mix of civil conflicts, insurgencies, and liberation-themed terrorist movements. Besides the recent Russia-Georgia dust-up, the only two potential state-on-state wars (North v. South Korea, Israel v. Iran) are both tied to one side acquiring a nuclear weapon capacity -- a process wholly unrelated to global economic trends. And with the United States effectively tied down by its two ongoing major interventions (Iraq and Afghanistan-bleeding-into-Pakistan), our involvement elsewhere around the planet has been quite modest, both leading up to and following the onset of the economic crisis: e.g., the usual counter-drug efforts in Latin America, the usual military exercises with allies across Asia, mixing it up with pirates off Somalia's coast). Everywhere else we find serious instability we pretty much let it burn, occasionally pressing the Chinese -- unsuccessfully -- to do something. Our new Africa Command, for example, hasn't led us to anything beyond advising and training local forces. So, to sum up: \* No significant uptick in mass violence or unrest (remember the smattering of urban riots last year in places like Greece, Moldova and Latvia?); \* The usual frequency maintained in civil conflicts (in all the usual places); \* Not a single state-on-state war directly caused (and no great-power-on-great-power crises even triggered); \* No great improvement or disruption in great-power cooperation regarding the emergence of new nuclear powers (despite all that diplomacy); \* A modest scaling back of international policing efforts by the system's acknowledged Leviathan power (inevitable given the strain); and \* No serious efforts by any rising great power to challenge that Leviathan or supplant its role. (The worst things we can cite are Moscow's occasional deployments of strategic assets to the Western hemisphere and its weak efforts to outbid the United States on basing rights in Kyrgyzstan; but the best include China and India stepping up their aid and investments in Afghanistan and Iraq.) Sure, we've finally seen global defense spending surpass the previous world record set in the late 1980s, but even that's likely to wane given the stress on public budgets created by all this unprecedented "stimulus" spending. If anything, the friendly cooperation on such stimulus packaging was the most notable great-power dynamic caused by the crisis. Can we say that the world has suffered a distinct shift to political radicalism as a result of the economic crisis? Indeed, no. The world's major economies remain governed by center-left or center-right political factions that remain decidedly friendly to both markets and trade. In the short run, there were attempts across the board to insulate economies from immediate damage (in effect, as much protectionism as allowed under current trade rules), but there was no great slide into "trade wars." Instead, the World Trade Organization is functioning as it was designed to function, and regional efforts toward free-trade agreements have not slowed. Can we say Islamic radicalism was inflamed by the economic crisis? If it was, that shift was clearly overwhelmed by the Islamic world's growing disenchantment with the brutality displayed by violent extremist groups such as al-Qaida. And looking forward, austere economic times are just as likely to breed connecting evangelicalism as disconnecting fundamentalism. At the end of the day, the economic crisis did not prove to be sufficiently frightening to provoke major economies into establishing global regulatory schemes, even as it has sparked a spirited -- and much needed, as I argued last week -- discussion of the continuing viability of the U.S. dollar as the world's primary reserve currency. Naturally, plenty of experts and pundits have attached great significance to this debate, seeing in it the beginning of "economic warfare" and the like between "fading" America and "rising" China. And yet, in a world of globally integrated production chains and interconnected financial markets, such "diverging interests" hardly constitute signposts for wars up ahead. Frankly, I don't welcome a world in which America's fiscal profligacy goes undisciplined,**

so bring it on -- please! Add it all up and it's fair to say that **this global financial crisis has proven the great resilience of America's post-World War II international liberal trade order.**

## **Economic decline does not worsen loss of US hegemony**

### **Data driven assessments ignore the relational aspect of heg – US is fine**

**White 13** (Thomas White, writer for The Huffington Post, Global Academic Fellow, NYU [“Why U.S. Hegemony Is Here to Stay” Huffington Post, November 12, 2013, [http://www.huffingtonpost.com/thomas-white/why-us-hegemony-is-here-t\\_b\\_4258264.html](http://www.huffingtonpost.com/thomas-white/why-us-hegemony-is-here-t_b_4258264.html), 7/16/14 JW]

U.S. hegemonic decline has been debated for decades, and the newest foil to its authority is China. The U.S. currently exists as the world's one and only superpower. But it is folly to believe that the U.S. will be deposed by China anytime soon, even with its double-digit growth and increasing regional influence.¶ Reports foretelling the end of U.S. hegemony rely on raw data, when it is international relationships that truly undergird world superpowers. No economic, military, and public opinion formula will decide the world's next global hegemon. These components matter--but not without international legitimacy, as derived from, and defined by, a global coalition of the willing.¶ It is here that the U.S. reigns supreme. The U.S. has won over, however begrudgingly, the international community as a whole. And until this allegiance to the U.S. breaks down, she will remain the absolute world superpower. The U.S. wields a power of influence, persuasion, and leadership on the international stage that no other state comes close to. She sets international law, ignores international law, and is accountable to no one. China, while clearly jockeying for authority and power, does not yet have legitimacy.

## **Economic decline does not worsen structural violence**

### **Economic collapse shifts to post-growth society – enables solutions to social problems**

James Gustave **Speth** '11

Speth is a professor at Vermont Law School and a Distinguished Senior Fellow at Demos, a nonpartisan public policy research and advocacy organization. A former dean of the Yale School of Forestry & Environmental Studies, he also co-founded the Natural Resources Defense Council, was founder and president of the World Resources Institute, and served as administrator of the United Nations Development Programme. "Creating A New Vision Of Economic Growth" 6/1, <http://www.countercurrents.org/speth010611.htm>

But an expanding body of evidence is now telling us to think again. The never-ending drive to grow the overall U.S. economy is ruining the environment; it fuels a ruthless international search for energy and other resources; it fails at generating the needed jobs; it hollows out communities; and it rests on a manufactured consumerism that is not meeting the deepest human needs. Americans are substituting growth and consumption for dealing with the real issues — for doing things that would truly make us and the country better off.

It is time for America to move to post-growth society where the natural environment, working life, our communities and families, and the public sector are no longer sacrificed for the sake of mere GDP growth; where the illusory promises of ever-more growth no longer provide an excuse for neglecting to deal generously with our country's compelling social needs; and where true citizen democracy is no longer held hostage to the growth imperative.

## **Economic decline does not worsen poverty**

**Their studies are wrong – empirical evidence are coincidences and modern growth forces the poor to work more without gaining more money – means growth doesn't solve poverty**

**Irwin 6/4** (Neil, senior economics correspondent for The New York Times, 6/4/14, New York Times, "Growth Has Been Good for Decades. So Why Hasn't Poverty Declined?," [http://www.nytimes.com/2014/06/05/upshot/growth-has-been-good-for-decades-so-why-hasnt-poverty-declined.html?\\_r=0](http://www.nytimes.com/2014/06/05/upshot/growth-has-been-good-for-decades-so-why-hasnt-poverty-declined.html?_r=0), ND)

**The surest way to fight poverty is to achieve stronger economic growth. That, anyway, is a view embedded in the thinking of a lot of politicians** and economists. "The federal government," Paul Ryan, the House Budget Committee chairman, wrote in The Wall Street Journal, "needs to remember that the best anti-poverty program is economic growth," which is

not so different from the argument put forth by John F. Kennedy (in a somewhat different context) that "a rising tide lifts all boats." In Kennedy's era, that had the benefit of being true. From 1959 to 1973, the nation's economy per person grew 82 percent, and that was enough to drive the proportion of the poor population from 22 percent to 11 percent. But over the last generation in the United States, that simply hasn't happened. Growth has been pretty good, up 147 percent per capita. But rather than decline further, the poverty rate has bounced around in the 12 to 15 percent range — higher than it was even in the early 1970s. The mystery of why — and how to change that — is one of the most fundamental challenges in the nation's fight against poverty. The disconnect between growth and poverty reduction is a key finding of a sweeping new study of wages from the Economic Policy Institute. The liberal-leaning group's policy prescriptions are open to debate, but this piece of data the researchers find is hard to dispute: From 1959 to 1973, a more robust United States economy and fewer people living below the poverty line went hand-in-hand. That relationship broke apart in the mid-1970s. If the old relationship between growth and poverty had held up, the E.P.I. researchers find, the poverty rate in the United States would have fallen to zero by 1986 and stayed there ever since. "It used to be that as G.D.P. per capita grew, poverty declined in lock step," said Heidi Shierholz, an economist at E.P.I. and an author of the study. "There was a very tight relationship between overall growth and fewer and fewer Americans living in poverty. Starting in the '70s, that link broke." Now, one shouldn't interpret that too literally. The 1959 to 1973 period might be an unfair benchmark. The Great Society social safety net programs were being put in place, and they may have had a poverty-lowering effect separate from that of the overall economic trends. In other words, it may be simply that during that time, strong growth and a falling poverty rate happened to take place simultaneously for unrelated reasons. And there presumably is some level of poverty below which the official poverty rate will never fall, driven by people whose problems run much deeper than economics. **But the facts still cast doubt on the notion that growth alone will solve America's poverty problem. If you are committed to the idea that poor families need to work to earn a living, this has been a great three decades.** For

households in the bottom 20 percent of earnings in the United States — in 2012, that meant less than \$14,687 a year — the share of income from wages, benefits and tax credits has risen from 57.5 percent of their total income in 1979 to 69.7 percent in 2010. The percentage of their income from public benefits, including Medicaid, food stamps, Social Security and unemployment insurance, has fallen in that time. **The fact that more of poor families' income is coming from wages doesn't necessarily mean that they're getting paid more, though. In fact, based on the E.P.I.'s analysis of data from the Census Bureau, it appears that what income gains they are seeing are coming from working more hours, not from higher hourly pay. Indeed, if you adjust for the higher number of hours worked, over the 1979 to 2007 period (selected to avoid the effects of the steep recession that began in 2008), hourly pay for the bottom 20 percent of households rose only 3.2 percent. Total,** not per year. In other



words, in nearly three decades, these lower-income workers saw no meaningful gain in what they were paid for an hour of labor. **Their overall inflation-adjusted income rose a bit, but mainly because they put in more hours of work.** The researchers at E.P.I. also looked at demographic factors that contribute to poverty, including race, education levels and changes in family structure (such as the number of one-parent versus two-parent households). **This look at the data also shows rising inequality as the biggest factor in contributing to the poverty rate, dwarfing those other shifts.** Debates over what kind of social welfare system the United States ought to have are always polarizing, from the creation of the Great Society in the 1960s to the Clinton welfare reforms of the 1990s to the Paul Ryan budgets of this era. **Conservatives tend to attribute the persistence of poverty, even amid economic growth, to the perverse incentives that a welfare state creates against working. But the reality is that low-income workers are putting in more hours on the job than they did a generation ago – and the financial rewards for doing so just haven't increased.** That's the real lesson of the data: **If you want to address poverty in the United States, it's not enough to say that you need to create better incentives for lower-income people to work.** You also have to devise strategies that make the benefits of a stronger economy show up in the wages of the people on the edge of poverty, who need it most desperately.

## Economic decline does not worsen use of fossil fuels

**Gas consumption is decreasing due to the recession – hybrid car use has nothing to do with it.**

**Gagliardi 13** (Lou, 6/12/13, “What a bad economy means for gasoline demand,” Christian Science Monitor, <http://www.csmonitor.com/Environment/Energy-Voices/2013/0612/What-a-bad-economy-means-for-gasoline-demand>, ND)

**As we have built more fuel efficient transportation vehicles over the years, we have been able to curtail our consumption of motor gasoline and distillates – diesel. However even with more fuel efficient vehicles, our gasoline consumption as measured by the U.S. Energy Information Administration (EIA) of total product supplied has been fairly stable since the 1980’s as more vehicles have come onto the road to offset greater fuel efficiency. Then in 2008, the Great Recession hit brought on by the financial crisis and the trend accelerated dramatically downward. By 2008 fuel consumption began to slide downward, by 2012 gasoline consumption literally fell off the cliff. The primary catalyst for the dramatic decline in motor gasoline demand has been weak economic growth in the U.S. that has been exacerbated by stubbornly high retail fuel prices pegged to relatively high crude prices, despite a deepening global recession. Not only has gasoline demand been weak since 2009, it has been successfully lower roughly each year to year the date in 2013. Within the last month gasoline retail sales have moved upward, whether we see this 2013 trend pass above 2012 remains to be seen. For now, clearly demand in 2013 remains below previous years. Retail fuel consumption may or may not recover to post 2008 levels, but what is clear is that we are living in a world of multi headwinds for energy consumption, relatively high crude prices, and slow global economic growth.**

## **Answer to Answer blocks**

## **Collapse now good – starts transition**

### **Economic Growth makes Human Extinction inevitable – Only a collapse now solves**

**Barry 08** (Dr. Glen Barry, Ph.D. in Land Resources from UW-Madison and President and Founder of Ecological Internet; 1/14/2008; “Economic Collapse and Global Ecology”; <http://www.countercurrents.org/barry140108.htm>)

**Given widespread failure to pursue policies sufficient to reverse deterioration of the biosphere and avoid ecological collapse, the best we can hope for may be that the growth-based economic system crashes sooner rather than later.** Humanity and the Earth are faced with an enormous conundrum -- sufficient climate policies enjoy political support only in times of rapid economic growth. Yet this growth is the primary factor driving greenhouse gas emissions and other environmental ills. **The growth machine has pushed the planet well beyond its ecological carrying capacity, and unless constrained, can only lead to human extinction and an end to complex life.** With every economic downturn, like the one now looming in the United States, it becomes more difficult and less likely that policy sufficient to ensure global ecological sustainability will be embraced. This essay explores the possibility that from a biocentric viewpoint of needs for long-term global ecological, economic and social sustainability; **it would be better for the economic collapse to come now rather than later. Economic growth is a deadly disease upon the Earth,** with capitalism as its most virulent strain. **Throw-away consumption and explosive population growth are made possible by** using up fossil fuels and **destroying ecosystems.** Holiday shopping numbers are covered by media in the same breath as Arctic ice melt, ignoring their deep connection. **Exponential economic growth destroys ecosystems and pushes the biosphere closer to failure. Humanity has proven itself unwilling and unable to address climate change and other environmental threats with necessary haste and ambition.** Action on coal, forests, population, renewable energy and emission reductions could be taken now at net benefit to the economy. Yet, the losers -- primarily **fossil fuel industries and their bought oligarchy -- successfully resist futures not dependent upon their deadly products. Perpetual economic growth, and necessary climate and other ecological policies, are fundamentally incompatible. Global ecological sustainability depends critically upon establishing a steady state economy,** whereby production is right-sized to not diminish natural capital. **Whole industries like coal and natural forest logging will be eliminated even as new opportunities emerge in solar energy and environmental restoration.**

### **Governments promote growth agenda – causes environmental destruction – need transition now**

**Norberg-Hodge 11** (Helena Norberg-Hodge, PhD, analyst of the impact of the global economy on cultures and agriculture worldwide, 9 Sept 2011, “Shifting Direction: From Global to Local”, <http://www.countercurrents.org/hodge090911.pdf> SC)

**To open a newspaper today is to be submerged in a flood of ever-worsening crises — from runaway global warming to the extinction of species, from the destruction of cultures to rising job insecurity, from poverty and crime to the erosion of democracy.** At first glance, these many problems can seem disparate and unconnected. But the fact is that much of **today's large-scale social and environmental breakdown springs from the same source: the increasingly globalised economy, with its massive, centralised system of**

**production and distribution. Globalisation is transforming unique individuals into mass consumers, and homogenising diverse cultural traditions around the world. It is destroying wilderness and biodiversity, and creating an expanding stream of waste that the biosphere simply cannot absorb. It is widening the gap between rich and poor worldwide, and leading to increased levels of crime and violence.** In the name of “growth” and “efficiency”, it is dividing us from each other and from the natural world on which we ultimately depend. Despite the apparent enormity of the task of making changes to our economic system, **isolating this root cause can actually be very empowering.** Rather than confront an overwhelming list of seemingly isolated symptoms, we can begin to discern the disease itself. Just as important, **the outline of a cure starts to take shape as well. Globalisation is often portrayed as the inevitable product of natural and evolutionary forces.** “Globalisation is not a policy choice,” Bill Clinton used to say, “It is a fact.” **But globalisation is neither an inevitable nor an evolutionary process: it is occurring because governments actively promote it and continually subsidise the framework necessary to support it.** In a sense, today’s globalised economy has been subsidised by the countries of the South for the past 500 years, at great expense to their own cultures, their land and their economies. The current dominance of the western industrial model could never have arisen without prolonged access to the South’s raw materials, labour (including slave labour) and markets.

## Yes, transition possible

### Transition key to stop eco-cide

**Barry 10**—President and Founder of Ecological Internet. Ph.D. in "Land Resources" from the University of Wisconsin-Madison, a Masters of Science in "Conservation Biology and Sustainable Development" also from Madison, and a Bachelor of Arts in "Political Science" from Marquette University, Glen, Resisting Global Ecological Change, 5 January 2010

The human family faces imminent and (Copenhagen would suggest) inevitable collapse of the biosphere – the thin layer of life upon an otherwise lifeless planet – that makes Earth habitable. Marshes and rivers and forests and fish are far more than resources – they and all natural ecosystems are a necessity for humanity's existence upon Earth. A few centuries of historically unprecedented explosion in human numbers and surging, albeit inequitable, consumption and resultant resource use, ecosystem destruction and pollution; is needlessly destroying being for all living things. Revolutionary action such as ending coal use, reforming industrial agriculture and protecting and restoring old forests and other natural ecosystems, is a requirement for the continuation of shared human being. Earth is threatened by far more than a changing atmosphere causing climate change. Cumulative ecosystem destruction – not only in climate, but also water, forests, oceans, farmland, soils and toxics -- in the name of "progress" and "development" -- threatens each of us, our families and communities, as well as the Earth System in total and all her creatures. Any chance of achieving global ecological sustainability depends urgently upon shifting concerns regarding climate change to more sufficiently transform ourselves and society to more broadly resist global ecological change. Global ecological, social and economic collapse may be inevitable, but its severity, duration and likelihood of recovery are being determined by us now. It does not look good as the environmental movement has been lacking in its overall vision, ambition and implementation. The growing numbers of ecologically literate global citizens must come forward to together start considering ecologically sufficient emergency measures to protect and restore global ecosystems. We need a plan that allows humans and as many other species as possible to survive the coming great ecological collapse, even as we work to soften the collapse, and to restore to the extent practicable the Earth's ecosystems. This mandates full protection for all remaining large natural ecosystems and working to reconnect and enlarge biologically rich smaller remnants that still exist. It is time for a hard radical turn back to a fully functioning and restored natural Earth which will require again regaining our bond with land (and air, water and oceans), powering down our energy profligacy, and taking whatever measures are necessary to once again bring society into balance with ecosystems. This may mean taking all measures necessary to stop those known to be destroying ecosystems for profit. As governments dither and the elite profit, it has become dreadfully apparent that the political, economic and social structures necessary to stop human ecocide of our and all life's habitats does not yet exist. The three hundred year old hyper-capitalistic and nationalistic growth machine eating ecosystems is not going to willingly stop growing. But unless it does, human and most or all other life will suffer a slow and excruciating apocalyptic death. Actions can be taken now to soften ecological collapse while maximizing the likelihood that a humane and ecologically whole Earth remains to be renewed. Geoengineering Won't Work The only "Plan B" offered by the ruling elite is to actively consider geoengineering global ecological processes and countless other techno-fixes. Rather than power down or sacrifice, it appears we as a species are willing to gamble with long odds with our and all lives. As if scouring all sorts of ecosystems of their life, global polluting industrialism, and embrace of consumption as the meaning of life is not enough of a load for global ecosystems. Now it is proposed we further alter oceans and the atmosphere unnaturally at a global scale to engineer a biosphere. Humans cannot control most invasive species, keep oil out of water, or feed everyone; yet now we are fit to run the biosphere? Unintended, inequitable and horrendous consequences are assured. Gaia – the Earth System – is far too complex to engineer and trying will seal the demise of our shared, finely honed, and naturally evolved biosphere. Geoengineering and the blind faith in technology it represents can only lead to further degradation of ecosystems and biosphere, over population and consumption, while virtually annihilating any chance of maintaining a natural and habitable Earth. It would be far better to embrace ecological restoration and other necessary policy measures including ending coal, industrial agricultural and old forest logging. A biosphere can never be engineered, but it may be planted, tended and assisted to restore itself. First you take the pressure off ecosystems, and then allow and assist them to naturally recover. Global ecological protection and restoration is the only sort of human ecosystem manipulation that can save us now. Given the momentum of seven billion super-predators consuming ecosystems to meet their every (and endless) whims, it is not possible to stop social, economic and ecological collapse. But there is a still chance of a worthy human society post economic and ecological collapse if we return to the land, power down and resist. It is all about having as much intact ecosystems as possible to lighten the blow and reconstitute society and ecosystems post-collapse. Here, and in my forth-coming book "New Earth Rising", as a political ecologist I offer a very different plan to the blind faith in technological progress that removes us more from natural life-giving ecosystem processes and patterns. Perhaps this can be called Plan "ER" for Earth Restoration. Powering Down It is a global ecological imperative that we begin dismantling the industrial growth machine to return to honest, well-lived and simple lifestyles – protecting, tending and restoring natural agro-ecosystems. Though terribly difficult given the choices society presents us, each of us must begin the process of getting off the grid, dramatically cutting our energy use and refusing to consume energy from burning fossil fuels. There will come a time where dismantling roads, industries and cities will be appropriate. We must insist that society's resources are used towards these ends. But make no mistake, no amount of "renewable energy" can allow current, much less predicted, excessive energy usage for everything from our food to our transport to our housing to continue. The "slowing" economy in the over-developed world is the logical conclusion of disease like growth in human populations, resource use and consumption. Highly satisfying for some for awhile, but such ecocidal resource binging cannot and will not last. And now the entire world, including the 2 billion that live on under \$2 a day, understandably and justly want better lives. Sadly though, through the power of corporate media, most poor style the ideal life upon the

excesses of the West. This means they undervalue their own more ecologically sustainable and personally satisfying lifestyles and livelihoods driven by community and sharing. Life is clearly more than what you own and consume, it is what you do and who you are that counts. And it is never too late to make positive changes. **Both personally and societally we must wean ourselves from gluttonous energy use and conspicuous over-consumption, and demand political and social structures that compel others do so as well.** As individuals we are faced with much outside of our control, so it won't all happen at once, but **each of us must begin disengaging ourselves from the dominant growth paradigm, and begin to achieve some measure of self-sufficiency.** Start by becoming as independent from slave wage labor and marketing neuroses as fast as financially feasible. Those that voluntarily begin to power down will be at an enormous advantage as the ecological shit hits the fan. And there is no better place to start than loving and being one with a piece of land. The land, think always of the land. Back to the Land The age of Ecological Restoration will be predicated upon a return to the land to practice local agrarian democracy. There is no chance of survival post economic, social and ecological collapse if you do not have a homestead – a piece of land, with water, good soils, tools, seeds and other implements of self-sufficiency. Cities are artificial constructs that consume resources from far and wide, and whose resource use and pollution can never be sustained. When collapse hits, billions will die there in a very short time, as the modern and ecologically illiterate learn food and water does not come from grocery stores and taps. Living the good life – or for that matter any life at all – will soon not be possible unless you have prepared your land and are willing and able to defend it. This does not necessarily suggest survivalist paranoia, as when the rains stop and Earth grows parched, it is highly likely mobility will cease and we will be left to live where we are. Prepare to live upon land within the limits of your bioregion. There are many opportunities to pursue alternative sharing communities. Large numbers of well-networked people locally, and on the Internet for as long as it lasts, going back to the land to live in an ecologically sustainable manner is the second component of a radical turn away from inappropriate technology and economic growth; to a restoration economy, living more fulfilling lives with the land and reintegrating humans with nature. Even the richest countries still possess relatively inexpensive land with remnant ecosystems that can be assisted to enlarge. Not-yet-over-developed countries still hold much potential for self-support. We must all relearn to plant and tend our forest gardens, organic permaculture and native ecosystems starting now and for eternity. As with any animal, we cannot long persist without intact habitat. Human well-being all comes back to the state of the land and its soil and biota. When we protect and restore land – water, oceans and atmosphere are much improved as well. It has long been known that full and sensible lives are possible from living within a local bioregion's bounty. The explosive growth in everything is a new phenomenon and cannot and will not be sustained under any conditions. It is not necessary to work so hard to acquire stuff. Much satisfaction comes from being one with land, having a loving family and community, and enjoying the arts, sports, literature and other aspects of culture we love. Ecological collapse will still be wrenching, but on the land you and a civilized way of life have a fighting chance. Live simply, laugh often and love deeply. Ecological Resistance The next stage towards ecological enlightenment and serving Gaia is passive refusal to participate in the system, escalating through various stages of resistance until known ecocidal activities are ended – and ecosystems protected and widely restored – as soon as possible. No one including this political ecologist is suggesting that imminently we should start waging violent revolution against the speculative industrial growth machine that is killing us all. At this time we would lose an outright fight. But clearly it is time to have a conversation regarding what other types of protest activities besides petitions and protests are valid in a dying world, even within supposed democracies. **What the Earth System needs badly right now is a million acts of resistance to obstruct and eventually destroy the ecologically unsustainable economic growth machine. There is an immediate need to vigorously obstruct the growth machine through active non-participation in the speculative industrial system.** At some point others may wish to consider destruction of Earth destroying equipment through carefully targeted acts of sabotage. And if this fails, we may come to realize a need to pursue more revolutionary acts, such as insurgency and guerrilla warfare. From time to time through human history it has been necessary to wage war to promote greater justice, equity and freedom – and now perhaps ecological sustainability as well.

## Tech solutions won't work – need to have shift from growth

**Trainer 12** (Ted, Dr. Ted Trainer is a Conjoint Lecturer in the School of Social Sciences, University of New South Wales, and a contributing author at the Simplicity Institute. This Report is an improved version of a paper published in Energy Policy (2010), made possible by the recent publication of better cost and output data., “CAN RENEWABLE ENERGY SUSTAIN CONSUMER SOCIETIES? A NEGATIVE CASE”, Simplicity Institute Report 12e, 2012, <http://simplicityinstitute.org/wp-content/uploads/2011/04/CanRenewableEnergySustainConsumerSocietiesTrainer.pdf>)

The total investment sum arrived at above is considerably less than that derived in Trainer [112], but the derivation is much more soundly based mainly due to recent access to more confident estimates of output and future capital costs. **The general conclusion supported by this discussion is that the capital costs for a totally renewable global energy supply would be far beyond affordable. This means that greenhouse and energy problems cannot be solved by action on the supply side, i.e., by technical developments which promise to provide quantities taken for granted in energy-intensive societies.** This general “limits to growth” perspective is that these and the other major global problems can only be solved by action on the demand side, i.e., by moving to ways, values, institutions and systems which greatly reduce the need for materials, energy and ecological resources. **It should be stressed that the 700 EJ/y supply target would give the world's expected 10 billion people by 2050 a per capita energy consumption of 70 GJ/y, which is around only one-third of the present Australian level. Thus if renewable sources were to provide all the world's people in 2050 with the present Australian per capita energy consumption, the supply target would have to be three times that taken in this exercise.** This analysis is not an argument against transition to full reliance on renewable energy sources. It is only an argument against the possibility of sustaining high energy societies on

them. Trainer [113] and [114] detail the case that the limits to growth predicament cannot be solved by technical reforms to or within consumer--capitalist society and that there must be radical social transition to some kind of 'Simpler Way.' This vision includes developing mostly small and highly self-sufficient local economies, abandoning the growth economy, severely controlling market forces, shifting from representative to participatory democracy, and accepting frugal and cooperative lifestyles. Chapter 4 of Trainer [115] presents numerical support for the claim that footprint and energy costs in the realm of 10% of those in present rich countries could be achieved, based on renewable energy sources. Although at this point in time the prospects for making such a transition would seem to be highly unlikely, the need to consider it will probably become more evident as greenhouse and energy problems intensify. It is not likely to be considered if the present dominant assumption that high energy societies can run on renewable energy remains relatively unchallenged.

AT Tech solves **Technology solution are the problem – the aff only makes the environmental situation they claim to solve worse**

**Barry 11** [Dr. Glen Barry – PhD in Land Resources from the University of Wisconsin-Madison, July 25, 2011, “EARTH MEANDERS: Ecology Bubble Bursts”, [http://www.ecoearth.info/blog/2011/07/earth\\_meanders\\_ecology\\_bubble.asp](http://www.ecoearth.info/blog/2011/07/earth_meanders_ecology_bubble.asp) ]

Hubristic faith in technological solutions to Earth being beyond its carrying capacity is fanatical madness. Continued technological reliance to “solve” Earth’s ecological carrying capacity problem will only inflate the bubble further and result in a bigger bursting, and less remnants from which to try to reconstitute an ecologically based future. Inane techno-optimism such as geo-engineering is ecocide right up to the end – pushing Earth to the wall, raping her, before killing her. It is far preferable to begin to adjust human demands upon ecology to reasonable limits. Not only is ecology truth, and you cannot eat money, but collapsing ecosystems are not substitutable with technology. What to do? We need knowledge based solutions to sustaining global ecology that are also just, equitable and enhance human dignity - not superstitious, illogical, greedy, and ignorant responses of god's self-chosen ruling elites. It is too late to stop the global ecology bubble from bursting. Yet a short window exists, perhaps, to lessen the impact of the ecology bubble burst, and provide for some manner of decent existence and potential for restoration and regeneration of a new human/nature project post-collapse. But if we continue to do nothing, or next to nothing, the cumulative impacts of global ecological collapse will intensify and prove to be unrecoverable, unless met with opposing force to end the ecocidal activities surpassing ecology's limits. It is time for us to return to the land, air, water and oceans and fight for their and our protection and restoration. Simply we must embrace ecological restoration, ecosystem protection, industrial power down, escalating protest and a people’s power Earth Revolution. For continued shared survival the human family must protect and restore natural ecosystems as the keystone response to biodiversity, ecosystem, climate, food, water, poverty and rights crises. Few are doing so as rigorously as is necessary.

**Newly developed technologies will worsen the problem**

**Huesemann** and Huesemann, **11** (Michael, Pacific Northwest National Laboratory, M.B.A., Arizona State University, Joyce, activist and academic, “Techno-fix: why technology won't save us or the environment,” New Society Publishers, pg. 17, Tashma)



As discussed in Chapter 1, many negative environmental consequences resulting from the technological exploitation, control and modification of nature are inherently unavoidable because human actions cannot really "improve" nature, a complex interconnected system that is continually adapting to change through the process of evolution. In addition, the conservation of mass principle as well as the first and second laws of thermodynamics can be invoked to demonstrate that it is impossible to escape the negative environmental effects of newly introduced technologies.



## AT economic decline caused WW1 WW2

**Both dedevelopment and sustained GDP growth aren't the right solution because both have negative impacts – taking focus away from GDP is the only way to solve and your numbers just aren't right**

**van den Bergh 10** (Jeroen, Institute for Environmental Science and Technology, Universitat Autònoma, Barcelona, "Environment versus growth – A criticism of 'degrowth' and a plea for 'a-growth'" Elsevier Ecological Economics, ND)

Here I will propose my own view, which can be summarized as opposing the GDP indicator rather than GDP growth. This is a subtle and essential difference, which is unfortunately not well recognized by either growth proponents or opponents. By implication, one has to be indifferent or neutral about economic growth. As is well documented, using the GDP indicator as a measure of welfare or progress suffers from a number of problems (vandenBergh, 2009). The use and calculation of the GDP indicator is inconsistent with good bookkeeping, namely dividing clearly between costs and benefits. GDP is really an estimate of the costs, not the benefits, of all formal, market-related activities in an economy. Economic theory does not offer any support for GDP as a measure of social welfare: both micro- and macroeconomic theories propose models in which social welfare is not identical to a GDP type of criterion. In fact, Weitzman (1976) has shown that GDP is only a good approximation of social welfare under very stringent, unrealistic conditions. According to happiness or subjective well-being studies, somewhere in between 1950 and 1970 the increase in mean welfare stagnated or even reversed into a negative trend in most rich countries, despite a steady pace of GDP growth (e.g., Layard, 2005). This pattern has been confirmed by corrections of GDP like Daly and Cobb's (1989) Index of Sustainable Economic Welfare. In this context the 'threshold hypothesis' has been formulated, which says that beyond a threshold income level the cost of growth exceed its benefits (Daly, 1991). Subjective well-being studies further find that relative income and various income-independent factors influence individual welfare or happiness, making it unlikely that the aggregation of individual absolute incomes to create a GDP will deliver a robust indicator of social welfare. Since status is a very scarce good, increases in relative income come down to a zero-sum game: what one individual gains, others lose — with no sure rise of social welfare. A third relevant insight of happiness research is that individuals tend to partly or wholly adapt or get used to changed circumstances, in both income and other factors (e.g., health). Since people do not realize this adaptation, they keep striving for 'more' income and consumption — making it possible for GDP to rise while welfare remains constant. In addition, GDP per capita as an indicator of welfare emphasizes average income and neglects income distribution. This is even plainly inconsistent with empirically established diminishing marginal utility of income, which is widely accepted in economics. Furthermore, GDP with its focus on market transactions excludes informal transactions between people. In line with this, GDP growth in both developed and developing countries often results from a transfer of informal activities to a formal market, in which case benefits were already enjoyed but in the absence of any market costs. An important subcategory of unpriced effects relates to use of natural resources and the environment. This involves negative external effects, goods and services delivered by nature, and capital depreciation associated with environmental change (fish stocks, forests) and depletion of energy and other resource supplies. All these shortcomings together imply that GDP cannot be relied upon to capture our welfare. If one accepts that GDP (growth) is not a robust, reliable indicator of social welfare (progress) then the only solution is to ignore it and as a result be completely indifferent about GDP growth. GDP growth is good in some periods or for some countries, but unconditional growth is not a wise aim. GDP growth is not generally necessary or sufficient for progress. Neither is GDP degrowth necessary or sufficient for sustainability. Correlations between GDP and welfare or between GDP and environmental impact are not constant and fixed over time. One can therefore not exclude the possibility of "dirty GDP degrowth" or a degrowth which hardly reduces environmental impact. The goal of unconditional GDP growth is a constraint on our search for progress: it frustrates good policies in many areas (climate, labor, health, public utilities). Some have called it the "neoliberal

ideology/ **tyranny of growth**" (Fournier, 2008) and "GDP fetishism" (Stiglitz, 2009). However, we should not fall in the trap of replacing this by GDP degrowth fetishism (i.e. the GDP degrowth strategy). **Removing GDP information from the center of macroeconomic and political debates means effectively that one cannot judge whether we grow or not. This then eliminates any basis for a GDP growth** (and GDP degrowth) paradigm. **It should be stressed that being against GDP or against unconditional GDP growth is not the same as being against growth. The reason is that once GDP information is no longer taken seriously** (ignored as a social goal) **one cannot be otherwise than neutral or indifferent about GDP growth** (and likewise about GDP degrowth). This **indifference is a good reason to use the term "GDP a-growth."**<sup>5</sup>

## **AT we fix the environment Consumption patterns key issue – not whether you have the tech to deal with the environment**

**Spratt et al. 10** (Stephen Spratt, BA from the University of East Anglia, an MSc from the School of Oriental and African Studies (SOAS), University of London, and a DPhil from the Institute of Development Studies, University of Sussex; "The Great Transition"; NEF; June 2010; [http://neweconomics.org/sites/neweconomics.org/files/Great\\_Transition\\_0.pdf](http://neweconomics.org/sites/neweconomics.org/files/Great_Transition_0.pdf))/sjl)

Our environmental challenges extend well beyond carbon however; **Earth's life support processes depend on the optimal functioning of ecosystems. Human life is dependent on the regular availability of food, water, shelter, optimal atmospheric conditions and nutrient recycling systems.** It is this interaction of biological, physical and chemical elements that **guarantees the provision of everything humankind needs to thrive on earth.** The natural world is also key to mental and physical well-being – a large body of research from Europe and North America shows that people and in particular children derive significant psychological benefits through exposure to nature and that exercise in a natural environment is more beneficial than in urban environments.<sup>19,20</sup> Yet **forests, food supplies, water, marine life and many other natural resources are under threat from over-consumption by those in developed countries** (Box 1). For everyone to live at the current European average level of consumption, we **would need more than double the biocapacity actually available – the equivalent of 2.1 planet Earths – to sustain us. If everyone consumed at the US rate, we would require nearly five.** Neither of these is a viable option: **consumption in the developed world must be cut back to preserve the ecosystem and enable growth of living standards in the developing world.** Of course, **the pressures we place on environmental resources through consumption often have what scientists term – without intentional irony – 'positive feedback' loops.** Consider soya. In 2005, the UK imported 774,623 tonnes of soya into the UK, with around two-thirds coming from Brazil.<sup>21</sup> Much of it goes into animal feed to support our relatively new-found habit of having plenty of meat and dairy products in our daily diet. But soya production is one of the key pressures that, along with forest fires, drought, deforestation and climate change, could push the Amazon rainforest over a tipping point where, rather than being a store of carbon dioxide, it begins to release it. **With the Amazon estimated to store 120 billion tonnes (± 30 billion) in biomass carbon,<sup>24</sup> scientists have said this switch could trigger 'runaway climate change'.**<sup>25,26</sup> If the environment is at breaking point, and with time running out, what about the economy?

## **Environmental protection not enough – global consumption patterns supported by growth moves us toward global environmental collapse**

**Trainer 10-** Social Work, University of NSW, Kensington 2052 (Ted F.E., "THE SIMPLER WAY:WORKING FOR TRANSITION FROM CONSUMER SOCIETY TO

A SIMPLER, MORE COOPERATIVE, JUST AND ECOLOGICALLY SUSTAINABLE SOCIETY," 2010,  
<http://socialsciences.arts.unsw.edu.au/tsw///PN>

Perhaps the **most worrying limits we are encountering are not to do with minerals or energy but concern environmental factors.** The World Wildlife Fund estimates that **in recent decades the quality of the planet's ecosystems had deteriorated 30%.** **Water: There are already serious water shortages in about 80 countries. Access to water will probably be the major source of conflict in the world in coming years.** **About 480 million people are fed by food produced from water pumped from underground.** The water tables are falling fast and the petrol to run the pumps might not be available soon. In Australia overuse of water has led to serious problems, e.g., salinity in the Murray. The greenhouse problem will make these problems worse. By 2050 the volume of water in the Murray-Darling system might be cut by half the present amount. Food and land. **Food prices and shortages are already serious problems, causing riots in some countries. If all people will soon have on earth had an American diet, which takes about .5 ha of cropland alone, we would need 5 billion ha, but there are only 1.4 b ha in use.** That area will decline as ecosystems deteriorate, water supply declines, salinity and erosion continue, pressure to produce increases, land is used to produce bio-fuels, and as global warming has its effects. Timber: **If all 9-10 billion people were to use timber at the US per capita rate we would need 4 times the world's forest area. Pressures from population growth and corporations is reducing tropical rainforests, where most species live.** Fish: **Nearly all fisheries are being over-fished and the oceans are being polluted. World fish catch is likely to go down from here on. The mass of big fish in the oceans, such as shark and tuna, is now only 10% of what it was some decades ago.** THE ECOLOGICAL LIMITS. More worrying than the resource limits are the ecological limits, and we have gone far beyond several of these. We are seriously damaging the life support systems of the planet. The World Wildlife Fund says that in general the quality of the global ecosystems have deteriorated 30% since about 1970. **The "footprint" measure indicates that we are taking biological resources at a rate that would take 1.5 planets to provide in a sustainable way. Most obvious is the fact that greenhouse gas emissions are at least 2 to 4 times sustainable levels. We are entering a period of massive loss of species.** Most worrying is the deterioration in the capacity of the globe's ecosystems to renew the conditions that all organisms need, e.g., maintaining the temperature and recycling nutrients. **The reason for this massive damage being done to forests, the atmosphere, soils, oceans, grasslands, coral reefs, and biodiversity, is that we are taking so many resources from nature and dumping so many wastes back all the time. One species, humans, is using the biological productivity of 40% of the land.** How much will be left for nature when 9 billion live like Americans? This shows how implausible the "tech-fix" faith is. It will not be possible to eliminate these impacts by continuing to produce as much as we do now but in "more sustainable ways"; the magnitudes are far too great. The sheer volume of production and consumption must be drastically reduced. Two points make the situation clear. The Australian per capita "footprint" is already about 10 times as great as will be possible for 9-10 billion people. Secondly it now seems clear that to cut CO2 emissions to a safe level we would have to totally eliminate fossil fuel use by 2050. (See Meinshausen et al, 2009.)

## **Must step away from consumption – and towards degrowth**

**Li 10** – Assistant Prof Economics @ U of Utah, Minqi, The 21st Century Crisis: Climate Catastrophe or Socialism, Paper prepared for the David Gordon Memorial Lecture at URPE Summer Conference 2010, [www.econ.utah.edu/~mli/Economics%25207004/Article%2520Forthcoming%2520RRPE%2520David%2520Gordon%2520Lecture.doc](http://www.econ.utah.edu/~mli/Economics%25207004/Article%2520Forthcoming%2520RRPE%2520David%2520Gordon%2520Lecture.doc)

The global average surface temperature is now about 0.8°C (0.8 degree Celsius) higher than the pre-industrial time. Under the current trend, **the world is on track towards a long-term warming between 4°C and 8°C.** At this level of global warming, the world would be in **an extreme greenhouse state not seen for almost 100 million years, devastating human civilization and destroying nearly all forms of life on the present earth** (Conner and McCarthy 2009). **The scientific community has reached the consensus that the current global warming results from** the excessive accumulation in the atmosphere of carbon dioxide (CO2) and other **greenhouse gases** (such as methane and nitrous oxide) **emitted by human economic activities.**<sup>1</sup> The capitalist historical epoch has been characterized by the explosive growth of material production and consumption. **The massive expansion of the world economy has been powered by fossil fuels** (coal, oil, and natural gas). **Since 1820, the world economy has expanded by about seventy times and the world emissions of carbon dioxide from**

fossil fuels burning have increased by about sixty times (see Figure 1). At the United Nations conference on climate change concluded at Copenhagen in December 2009, the world's governments officially committed to the objective of limiting global warming to no more than 2°C. However, according to the "Climate Action Tracker", despite the official statement, the national governments' current pledges regarding emission reduction in fact imply a warming of at least 3°C by the end of the 21st century with more warming to come in the following centuries (Climate Action Tracker 2010). In reality, all the major national governments are committed to infinite economic growth and none of them is willing to consider any emission reduction policy that could undermine economic growth. This is not simply because of intellectual ignorance or lack of political will. The pursuit of endless accumulation of capital (and infinite economic growth) is derived from the basic laws of motion of the capitalist economic system. Without fundamental social transformation, human civilization is now on the path to self-destruction. The next section (Section 2) reviews the basic scientific facts concerning the climate change crisis. Without an end of economic growth, it is virtually impossible for meaningful climate stabilization to be achieved (Section 3). However, both capitalist enterprises and states are constantly driven to expand production and consumption. The system of nation states effectively rules out a meaningful global political solution to the climate change crisis (Section 4). The climate change crisis is but one of several long-term historical trends that are now leading to the structural crisis of capitalism (Section 5). The resolution of the crisis and the survival of the humanity require the building of a fundamentally different social system that is based on social ownership of the means of production and society-wide planning (Section 6).

**Our advantage turns your DA**

## **Political instability causes economic decline**

### **Political instability – even minor – tanks economy**

Ari Aisen and Francisco Jose Veiga, November 2011

(IMF Working Paper, How does Political Instability Affect the Economy. *Ari Aisen and Francisco Jose Veiga*, November 2011)

The widespread phenomenon of political (and policy) instability in several countries across time and its negative effects on their economic performance has arisen the interest of several economists. As such, the profession produced an ample literature documenting the negative effects of political instability on a wide range of macroeconomic variables including, among others, GDP growth, private investment, and inflation. Alesina et al. (1996) use data on 113 countries from 1950 to 1982 to show that GDP growth is significantly lower in countries and time periods with a high propensity of government collapse. In a more recent paper, Jong-a-Pin (2009) also finds that higher degrees of political instability lead to lower economic growth.<sup>1</sup> As regards to private investment, Alesina and Perotti (1996) show that socio-political instability generates an uncertain politico-economic environment, raising risks and reducing investment.<sup>2</sup> Political instability also leads to higher inflation as shown in Aisen and Veiga (2006). Quite interestingly, the mechanisms at work to explain inflation in their paper resemble those affecting economic growth; namely that political instability shortens the horizons of governments, disrupting long term economic policies conducive to a better economic performance.

This paper revisits the relationship between political instability and GDP growth. This is because we believe that, so far, the profession was unable to tackle some fundamental questions behind the negative relationship between political instability and GDP growth. What are the main transmission channels from political instability to economic growth? How quantitatively important are the effects of political instability on the main drivers of growth, namely, total factor productivity and physical and human capital accumulation? This paper addresses these important questions providing estimates from panel data regressions using system-GMM3 on a dataset of up to 169 countries for the period 1960 to 2004. Our results are strikingly conclusive: in line with results previously documented, political instability reduces GDP growth rates significantly. An additional cabinet change (a new premier is named and/or 50 percent of cabinet posts are occupied by new ministers) reduces the annual real GDP per capita growth rate by 2.39 percentage points. This reduction is mainly due to the negative effects of political instability on total factor productivity growth, which account for more than half of the effects on GDP growth. Political instability also affects growth through physical and human capital accumulation, with the former having a slightly larger effect than the latter. These results go a long way to clearly understand why political instability is harmful to economic growth. It suggests that countries need to address political instability, dealing with its root causes and attempting to mitigate its effects on the quality and sustainability of economic policies engendering economic growth.



## **Fed Reserve Miscalc DA – needs work as the next couple weeks develop**

Argument that Fed will increase interest rates predictably in 2015; however, if they see growth in US job and prices TOO fast then they will miscalc and give in to pressure too quickly and will jack the economy. The argument emerged from a few cards late in the process – so here are the cards we have you could use to develop your own argument.

**Negative Side**

## **Uniqueness – 2015 predictable**

## **AT will have to raise rates in SQ**

### **Fed will keep rates low now – Yellen can resist the pressure**

**Kearns and Boesler 14**[Jeff Kearns and Matthew Boesler, Bloomberg, "Yellen Says Weak Job Market Shows U.S. Still Needs Stimulus", 7/15/14, <http://www.bloomberg.com/news/2014-07-15/yellen-says-high-degree-of-easing-needed-amid-job-market-slack.html>, accessed 7/19/14]RMT

"She is a determined dove," **David M. Jones, president of Denver-based economic consulting firm DMJ Advisors LLC** and a former Fed economist who has written four books on the central bank, **said today in a Bloomberg Radio interview. "She's more worried about improving labor-market conditions, the long-term unemployed, flat wages, and other kinds of indications that there's still considerable slack in the labor market. In her heart, that drives her decision."** Photographer: Pete Marovich/Bloomberg Janet Yellen, chair of the U.S. Federal Reserve, during a news conference following a... Read More In prepared testimony, **Yellen repeated that interest rates are likely to stay low for a "considerable period" after the Fed ends its asset-purchase program, which she said could happen following the October meeting.**

### **Fed resisting calls to increase rates now – risk of earlier hike hurts economy**

**Lange 7/17** (Jason, Reuters Washington Correspondant, 7/17/14, Reuters, "Fed seen likely to raise rates in 2nd quarter of 2015: Reuters poll," <http://www.reuters.com/article/2014/07/17/us-economy-poll-usa-idUSKBN0FM1PY20140717>, ND)

Rising **inflation pressures could push the U.S. Federal Reserve to raise interest rates** as early as **the second quarter of next year**, according to a Reuters poll of analysts. America's jobless rate sank to almost a six-year low in June and consumer prices posted their largest rise in May in more than a year, bolstering the belief that the U.S. economy is turning a corner. Now **many Fed watchers are bringing forward forecasts on the timing of when the central bank will raise interest rates. "All things considered, there is now an increased risk of an earlier first rate hike,"** economists at Bank of America Merrill Lynch said in a report, **Policymakers slashed rates to fight the deep 2007-2009 recession and have held them near zero since 2008. Many analysts now think the Fed is only months away from tightening policy.** The Fed will likely raise its target for the overnight lending rate, known as the Fed funds rate, to 0.25 percent between April and June next year, **according to the median forecast of 71 analysts polled in the past week. Economists now see the Fed funds rate ending next year at 0.75 percent.** When surveyed a month earlier, most thought the first hike would come in the third quarter of 2015 but that rates would end the year at 1.0 percent. **The growing confidence in America's recovery from the deep 2007-2009 recession stands at odds with the sharp economic contraction registered in the first three months of this year.** Economists largely dismiss the poor performance as a blip brought on by bad weather. While the median forecast for economic growth in 2014 plunged to 1.7 percent, down a half percentage point since the last poll, **forecasters continued to see much stronger growth rates of around 3 percent in 2015 and 2016. Forecasters are also optimistic over the future path of the unemployment rate, seeing it fall to 6.0 percent by the end of this year and to average 5.7 percent in 2015. Many experts point out inflation is around the level when historically it has put upward pressure on the pace of price increases, and the poll showed slightly higher forecasts for inflation this year and next.** Wage increases, which are one of the fundamental drivers of consumer prices, have been lackluster since the recession struck. But **asked in the poll when wage increases would pose a serious future inflation concern, most economists said this could happen next year.** That is also when many see the Fed hiking rates. **"Confidence is building even among the (Fed's) doves that wage inflation is poised to turn,"** said Eric Green, an economist at TD Securities in New York.

## Link debate

### **Inflationary pressures building – Fed faces key dilemma about timing of increase in interest rates risks miscalculation**

**Shepherd, 6/27/2014** ( Benjamin, “The Fed’s Dreaded Dilemma: A Weak Economy Plus Inflation”

InvestingDaily <http://www.investingdaily.com/20619/the-feds-dreaded-dilemma-a-weak-economy-plus-inflation-2/> )

While the economy contracted at a greater than expected 2.9 percent in the first quarter of 2014, in May the consumer price index (**CPI**) **rose** at an annualized 2.1 percent, **its highest level since October 2012**. Energy prices were up 5.8 percent from a year earlier, while food prices rose 2.1 percent. Even the Federal Reserve’s own preferred measure of inflation, the personal consumption expenditures (PCE) index, popped up to 1.8 percent last month.

The fact that the Fed’s PCE index is showing inflationary pressure is significant, since it is essentially designed to lowball price increases. The CPI gives a 31 percent weighting to shelter costs and a 17 percent weighting to transportation (read as rent and gasoline), which the PCE basically cuts in half. By reducing the volatility of its preferred inflation gauge, the Fed essentially gives itself the leeway to maintain a looser policy longer.

But the fact that the PCE is on the rise leaves the Fed in a conundrum, having said for years now that it would act when inflation reaches an annualized 2 percent, a level that is fast approaching. The primary policy tool at its disposal for addressing inflationary pressures is interest rates, a lever the Fed probably doesn’t want to press just yet. Despite the fact that inflation is clearly picking up, consumer spending has actually contracted over the past two months on an inflation-adjusted basis and is growing well below the pre-recession average of 5 percent. Incomes were also up by just 3.5 percent last month, another metric which typically ran above 5 percent for much of the two decades prior to 2008.

As we’ve often said in the past, the Fed has historically been slow to pull the trigger on increasing interest rates and contributed to the formation of bubbles in the economy. While some Fed officials, such as Charles Plosser, the president of the Federal Reserve Bank of Philadelphia, have said that the bank should be aggressive on rates, this is the classic dreaded dilemma. It’s been created by the Fed’s dual mandate of working towards full employment while maintaining price stability. If it acts now to address rising inflation by raising rates, the Fed runs the risk of stalling out what has been an anemic recovery. If you lived through the 1970s, the term stagflation (a stagnant economy combined with inflation) is likely coming to mind about now, though we’re nowhere near those levels yet.

Still, it should come as little surprise that the inflation debate is becoming more heated with forecasters and economists from Barclays (NYSE: BCS) to BlackRock (NYSE: BLK) sounding the alarm on the rising prices and a changing investment environment.

### **Link – perception of fast growth triggers Fed hike**

**Shepherd, 6/27/2014** ( Benjamin, “The Fed’s Dreaded Dilemma: A Weak Economy Plus Inflation”

InvestingDaily <http://www.investingdaily.com/20619/the-feds-dreaded-dilemma-a-weak-economy-plus-inflation-2/> )

To break stagflation’s back, famous Fed chairman Paul Volcker hiked interest rates to unprecedented levels. In 1981 the federal funds rate peaked at 20 percent and the prime rate rose to 21.5 percent. We’re unlikely to see such a scenario again, but some are saying that we’re likely to see rate increases by mid-2015. That, in turn, could

**bring the great bond run to a grinding halt as yields rise and bond prices fall. We've already seen that effect in action when the spending and inflation data was released last week, pushing the 10-year Treasury yield up to 2.625 percent and pushing gold prices up by nearly 3 percent on the day of the release.**

**Clearly, the time for decisive action is approaching if the Fed truly means to keep inflation tame. At this point, the deciding factor will likely be economic growth in the next half of the year; if it comes in at or above 3 percent – a reading actually well below the general consensus – look for a rate by mid-2015. Otherwise, low interest rates are likely to persist for some time yet to come,** allowing inflationary pressures to continue building in the US economy.

## **Pace of growth key determinant of fed policy – restrained growth delays increase in interest rates**

Ben Leubsdorf, Jul 8, 2014 ("Fed's Lacker: 'Subdued' Productivity Gains Will Restrain U.S. Economic Growth" <http://blogs.wsj.com/economics/2014/07/08/feds-lacker-middling-productivity-gains-will-restrain-u-s-economic-growth/> )

**The sluggish gains in U.S. workforce productivity seen over the last several years will likely continue to hold back overall economic growth, Federal Reserve Bank of Richmond President Jeffrey Lacker said Tuesday.** In a speech to a Rotary luncheon in Charlotte, N.C., Mr. Lacker predicted the U.S. economy will grow at an average rate of 2% to 2.5% over the near term, citing "subdued" productivity gains, "moderate" increases in consumer spending and "more tempered" growth in housing construction. **"I've come to the conclusion that a sustained acceleration of growth to over 3% in the near future is unlikely,"** he said. **Mr. Lacker is somewhat less optimistic about near-term U.S. economic growth than most of his central-bank colleagues.** Fed officials, in projections updated last month, predicted gross domestic product—the broadest measure of output across the economy—will grow 3% to 3.2% in 2015 and 2.5% to 3% in 2016. **Those Fed projections, as of December, predicted growth around 3% in 2014. But GDP contracted at a 2.9% seasonally adjusted annual rate in the first quarter, and Fed officials now are predicting growth of 2.1% to 2.3% this year. That is closer to Mr. Lacker's initial prediction of growth around 2% in 2014.** **"The pickup in growth late last year is certainly a welcome development, and it may well be a harbinger of stronger growth ahead. But experience with similar growth spurts in the recent past suggests that it is too soon to make that call,"** Mr. Lacker said in a speech on Feb. 4. Mr. Lacker noted on Tuesday **the divergence between the contractionary GDP reading for the first quarter and the recent strong expansion in employment.** The Labor Department said last week that U.S. nonfarm employers added a seasonally adjusted 288,000 jobs in June and the unemployment rate fell to 6.1%, its lowest level since September 2008. "In my view, **the employment report...provides a far more representative picture of economic trends than that first-quarter GDP number that was so depressed,**" Mr. Lacker said. While noting productivity gains have slowed since 2007, Mr. Lacker said he disagrees with economists who say "that major, broad-based advances in technology are far less likely than in the past, and that we should prepare for relatively stagnant productivity growth trends going forward." He said he is "amazed at the historical record of technological innovations that solve a current problem and simultaneously open the door to all sorts of interesting new developments and new possibilities." **Mr. Lacker described inflation as remaining "well-behaved" even as several broad gauges of U.S. prices have risen in recent months after an extended period of sluggish gains.** The Fed's preferred way to measure inflation, the Commerce Department's personal consumption expenditures price index, rose 1.8% in May from a year earlier. The Fed has set a 2% target for inflation. **"Inflation numbers run hot or cold for several months at a time, but the latest numbers suggest inflation's bottomed out. It is indeed moving towards the [Federal Open Market Committee's] target, and I expect that firming trend to continue,"** he said. Mr. Lacker also said the Fed is on track to end its bond-buying program "before the end of the year," and that **most central-bank officials expect to begin raising short-term interest rates sometime in 2015.** "This is consistent with the FOMC's past practice of raising rates pre-emptively, before undesirable inflation pressures emerge," he said.

## Links – job growth

### **Fed will increase rates based on assessment of jobs**

**Smith 7/15** (Veronica, staff economics writer for AFP News, 7/15/14, Yahoo News, "Rate hike sooner if jobs recovery holds, says Fed's Yellen," <http://news.yahoo.com/rate-hike-sooner-jobs-recovery-holds-says-feds-204019295.html>, ND)

**The Federal Reserve could raise its key interest rate sooner than expected if the job market continues to make solid improvement**, Fed Chair Janet Yellen said Tuesday. **"Although the economy continues to improve, the recovery is not yet complete,"** Yellen said in the Fed's semi-annual report to Congress. Warning against "false dawns" in the five-year-old dragging recovery from the Great Recession, **Yellen said the economy was moving toward the Fed's dual goals of maximum employment and price stability of around 2.0 percent inflation. After a sharp economic slump** in the first quarter, largely **due to severe weather, a recent spate of indicators on production and spending suggested that growth rebounded in the second quarter**, "but this bears close watching," she told the Senate Banking Committee. **The unemployment rate has fallen nearly 1.5 percentage points over the past year, and stood at 6.1 percent in June, while job growth that averaged about 230,000 a month over the first half of the year** was a "somewhat stronger pace" than in 2013, she said. Yellen voiced concern that the labor market is still showing "significant slack" with a low participation rate, slow wage growth and a jobless rate still below the Fed's estimate of a longer-run normal rate of 5.2-5.5 percent. **Inflation, though it has moved up in recent months, remains below the Fed's longer-run 2.0 percent target**, she said. Yellen said the policy-setting Federal Open Market Committee (FOMC) was closely following the mixed economic signals to determine the future path of its near-zero federal funds rate target. **The rate has been pegged between zero and 0.25 percent since December 2008 to support the economy's recovery by tamping down longer-term interest rates. "If the labor market continues to improve more quickly** than anticipated by the committee, resulting in faster convergence toward our dual objectives, **then increases in the federal funds rate target likely would occur sooner and be more rapid than currently envisioned,"** Yellen told lawmakers. But, she said, the direction of interest rates "likely would be more accommodative than currently anticipated" if economic performance is disappointing. Markets expect the first Fed rate hike to come in mid-2015, and Yellen said it would come "sometime in 2015."

# Internal link

## **Surprise improvement in economy risks increase in interest rates – miscalculation possible**

**Hilsenrath 7/15** (Jon, chief economics correspondent for The Wall Street Journal, 7/15/14, Wall Street Journal, "Fed's Yellen Hedges Her View on Rates," <http://online.wsj.com/articles/feds-yellen-u-s-economy-continues-to-improve-but-recovery-not-yet-complete-1405432838>, ND)

Federal Reserve Chairwoman Janet **Yellen defended keeping interest rates low before Congress** on Tuesday, **but opened the door a crack to earlier-than-planned rate hikes if the labor market continues its surprising improvement.** "If the labor market continues to improve more quickly than anticipated by the [Fed]," she told the Senate Banking Committee, **"then increases in the federal-funds rate target likely would occur sooner and be more rapid than currently envisioned."** The Fed has held its benchmark short-term rate near zero since late 2008. While continuing to stress that "a high degree of monetary policy accommodation remains appropriate," Ms. **Yellen's acknowledgment that rates could rise sooner than planned marks a notable new hedge. She made a similar comment at a news conference in June,** but without pointing out that the unemployment rate and other job-market measures were improving more quickly than officials expected. Ms. **Yellen's testimony Tuesday,** the first of two days of hearings on the economy and monetary policy, **was her first update on the economy since an unexpectedly strong Labor Department report earlier this month showed the unemployment rate dropped to 6.1%** in June and businesses expanded payrolls by a robust 288,000. The jobless rate is down from 7.5% a year ago and payrolls have grown on average by 230,000 a month during the first half of the year. **In December officials didn't expect to see the jobless rate near 6% until late 2015. Some of the Fed's 12 regional bank presidents have argued recently the central bank should turn its eyes toward raising short-term interest rates as the job market improves,** turning up the volume on an internal Fed debate about the timing of rate increases. **"Today's economy, with a strengthening labor market and rising inflation, is ready for a more-normal rate environment,"** Kansas City Fed President Esther George said in a speech Tuesday night. "Waiting too long may allow certain risks to build that if realized, could harm economic activity."



# AT Fed Miscalc DA

## Fed won't miscalc – current growth numbers will check inflation concerns

**Makin, 6/27/2014** (John H. "Worry about growth, not inflation" AEI

<http://www.aei.org/outlook/economics/monetary-policy/federal-reserve/worry-about-growth-not-inflation/> )

All of 2014 is not looking very good, either. If the growth pace during the second half of the year "rebounds" to an above-trend 2.5 percent pace, given a first-quarter -0.5 percent growth pace, the average growth rate for all of 2014 will be a sickly 1 percent. That is far below the much-touted 3 percent pace.

### Stop Fussing about "Exit" and Inflation

There is a silver lining to the scary growth numbers. They ought to put to rest current talk about an inflation scare that followed the release of a 2.1 percent year-over-year growth rate for the consumer price index (CPI) in mid-June. Inflation Cassandras at the Fed, in the private sector, and in academia are worried that the Fed will need to start raising interest rates sooner than the currently expected mid-2015 date to prevent a risky "jump" in inflation to 3 percent or higher.

This inflation fussing is nonsense for three reasons. First, it is not going to happen, especially in an economy that is barely growing. Second, there is nothing the Fed can or should do about the recent food-and-energy-driven rise in headline inflation. And third, an inflation rate that stabilizes in the 1.5 to 2.5 percent range would be optimal for a US economy struggling to sustain a subpar growth rate of barely 2 percent as real wages stagnate.

## Inflationary trends will check themselves – inventory correction

**Makin, 6/27/2014** (John H. "Worry about growth, not inflation" AEI

<http://www.aei.org/outlook/economics/monetary-policy/federal-reserve/worry-about-growth-not-inflation/> )

Given virtually zero growth and abundant signs of capacity (see figure 2), the recent modest "jump" in the headline CPI inflation rate will be reversed by fall 2014. During the first quarter, business-fixed investment actually subtracted .27 percentage points from growth. A collapse of inventories subtracted another 1.7 percentage points. Companies that fear weak growth tend to run down inventories, as they did during the first quarter. Net exports subtracted another 1.5 percentage points from growth, while the government sector subtracted 0.14 percentage points.

## Inflation low now – no upward pressure

**Makin, 6/27/2014** (John H. "Worry about growth, not inflation" AEI

<http://www.aei.org/outlook/economics/monetary-policy/federal-reserve/worry-about-growth-not-inflation/> )

Weak wage growth also portends a lack of inflation pressure. Money wages have been rising at a tepid 2 percent pace over the last several years of the "recovery." With headline inflation at 2.1 percent, real wages are actually falling at a 0.1 percent annual pace. There is virtually no growth of real wages (see

figure 3), which in part accounts for the weak demand growth and persistently low inflation that is currently confounding inflation hawks.

### **Limited inflation allows wages to adjust – actually benefit nominal profits for business**

**Makin, 6/27/2014** (John H. "Worry about growth, not inflation" AEI

<http://www.aei.org/outlook/economics/monetary-policy/federal-reserve/worry-about-growth-not-inflation/> )

**The Fed should ignore, and to its credit has ignored, the recent modest inflation blip.** Food prices have been driven up by drought conditions, and energy costs have been boosted by rising tensions in the Middle East. **There is nothing the Fed can do about either factor.**

**Formally, central banks ignore negative supply shocks when setting monetary policy because tightening policy (a negative demand shock) would cause a sharp drop in output and employment if implemented following a negative supply shock arising from a jump in food or energy prices.** This danger surfaced in 1974 when, after a sharp jump in energy prices drove up headline CPI, the Fed tightened as part of a "whip inflation now" (WIN) program, only to watch the economy collapse. Policy was quickly reversed. The dismaying WIN episode reinforced the Fed's use of the core (excluding food and energy prices) personal consumption expenditure (PCE) deflator to set policy.

**Core PCE inflation, the best guide to Fed policy, has stabilized at an average level well below the Fed's 2 percent target. It currently stands at 1.5 percent. If anything, the Fed, along with many households and firms, would like to see core PCE rise a bit closer to 2 percent (see figure 4). That would help reduce real debt loads. Furthermore, firms would welcome the prospect of higher nominal sales revenue that would follow higher inflation, perhaps by enough to increase what has heretofore been a tepid flow of investment. Stated in more formal terms, the fact that US inflation has persistently held below forecasted levels has boosted real wages and real interest rates, contributing to subpar growth of output and employment.**

### **Fed action now on inflation and interest rates hurts employment and growth – triggers economic decline**

**Makin, 6/27/2014** (John H. "Worry about growth, not inflation" AEI

<http://www.aei.org/outlook/economics/monetary-policy/federal-reserve/worry-about-growth-not-inflation/> )

**Lessons abound to reinforce the dangers of overreacting to modest inflation increases and of rising fears of inflation increases.** The Bank of Japan's anti-inflation obsession locked the nation into a 15-year period of stagnation after a 1997 tax increase. The European Central Bank's (ECB's) current policy, allowing inflation to drop to a 0.5 percent pace (too close to outright deflation and persistent stagnation), has kept Europe's growth rate at a perilously low 1.1 percent. And that low growth rate is due largely to Germany's 3.3 percent growth rate. Italy is struggling in a deep recession at a -1.5 percent growth rate, as is much of Southern Europe. French growth is zero. Spain has recently embarked on a program of tax cuts to offset some of the damage arising from the ECB's obsessive, too-tight monetary stance.

**It remains fashionable, imparting a false aura of wise prescience, to rail against the dangers of "runaway inflation." It is fine to let the inflation Cassandras warn of disasters ahead. Caution is always in order and will eventually be necessary. But it is not fine to heed their current calls for earlier Fed boosts of interest rates. The results of such a surprise move would be, as usual, lower growth of output and employment, not to mention a rising risk of damaging outright deflation.**

It is also important to remember that the Fed, for better or worse, has been encouraging businesses and households to take more risk to push up asset prices and enhance wealth and spending. This is all well and good. **But if the Fed becomes overly concerned with the specter of possible inflation and acts on that by raising interest rates, asset markets and wealth will drop sharply and the economy will weaken further.**

## **Rates won't increase til 2016**

**Makin, 6/27/2014** (John H. "Worry about growth, not inflation" AEI

<http://www.aei.org/outlook/economics/monetary-policy/federal-reserve/worry-about-growth-not-inflation/> )

**It is disconcerting that the Fed has so far said virtually nothing about very weak GDP growth numbers or about its implications for possible changes to policy aimed at sustaining growth.** After the June 18 Federal Open Market Committee meeting, Fed Chair Janet Yellen instead chose to look ahead to a growth rebound based on stronger growth of consumption and investment, for which there is yet no evidence. **So far, the Fed's only viable policy option has been to talk about further delaying the first interest rate increase that it mandates. Markets have set that date at about mid-2015. It will no doubt slip further to 2016, given the weakness of the US economy.**

## **Fed can't ignore increase in economy – raising rates early inevitable**

**Evans 7/4** (Pete, Staff Writer for CBC News, 7/4/14, "Interest rates may see earlier hike in wake of strong jobs data,"

<http://www.cbc.ca/news/business/interest-rates-may-see-earlier-hike-in-wake-of-strong-jobs-data-1.2695370>, ND)

A suite of **positive economic news** this week **makes it more likely that the U.S. will raise interest rates sooner** than most experts have been anticipating. On Thursday, the U.S. Commerce Department unveiled data showing **the American economy added another 288,000 jobs in June. That's the fifth straight month that the figure has come in better than was expected, and the strong job gains are pushing the stubbornly high unemployment rate lower.** "Since February, this has now become a textbook jobs expansion," said Patrick O'Keefe, director of economic research at the consultancy CohnReznick. **It is both broad and accelerating." America's jobless rate is now at 6.1 per cent, the lowest it's been since September 2008,** which is before bank failures such as Bear Stearns and Lehman Brothers kicked off a worldwide recession from which the global economy is still recovering. **The global downturn is also what compelled central banks, including those in Canada and the U.S., to slash rates to record lows in an attempt to spur borrowing and spending. All that cheap money has lit a fire in equity markets,** with the TSX and Dow Jones Industrial Average each breaking all-time record highs this week. By their mandate, central banks don't care much about things like the stock market in making their interest rate decisions. But **as the good news mounts, it's getting harder and harder for them to ignore: the economy is starting to heat up, so there's less and less reason to keep rates so low.** In Thursday's report, June's figure was strong, but the data agency also upgraded its numbers for April and May higher, showing that those months added 224,000 and 304,000 new jobs, respectively. **"The steady stream of positive U.S. data continues, with the key report— hiring — the icing on the cake,"** BMO economist Jennifer Lee said in a report Thursday. **While the strong jobs data certainly adds fuel to the rate hike fire, it's far from a sure thing. The jobless rate is now at its lowest level in six years, but it's still above the 5.5 per cent level that the Fed is on record as saying is the "equilibrium rate" it is looking for.** Nor is there much evidence that wages are increasing in lockstep with new jobs. **Average pay grew by about two per cent during the last 12 months, the report showed. That's a decent showing, but still below the historical average of 3.5 per cent it has shown when the economy is on solid footing.** Still, with a few more months like that, it's going to be impossible to ignore the improving economic picture forever. **Most economists expect the Federal Reserve to slowly unwind it's qualitative easing bond-buying program by the end of this year, with a view to actually increasing rates some time in 2015. But this week's data is moving that timeline up in some people's eyes. "We expect the Fed to halt its quantitative**

easing this October and we anticipate that the first rate hike will come in March next year," Capital Economics' U.S. strategist Paul Ashworth said. That's three months earlier than the company was thinking would happen before the jobs data came out. What's more, once rates do start moving, they're now a lot likelier to move higher and faster, he says. The Fed's benchmark rate will be at 1.25 by the end of 2015 and up to three per cent by 2016, Ashworth expects.

## **The fed won't raise interest rates – Yellen doesn't think it will work right now**

**Irwin 7/2** (Neil, senior economics correspondent for The New York Times, 7/2/2014, New York Times, "Janet Yellen Signals She Won't Raise Rates to Fight Bubbles," <http://www.nytimes.com/2014/07/03/upshot/janet-yellen-signals-she-wont-raise-rates-to-fight-bubbles.html>, ND)

**Ms. Yellen** stakes out her position in about as clear a language as you'll see from a central banker: She believes that it would most likely be a bad idea to raise interest rates to fight financial excesses. Her focus, crucially, is not on preventing Wall Street from having ups and downs, but on making sure that those ups and downs don't bring economic disaster. This focus on resilience differs from much of the public discussion, which often concerns whether some particular asset class is experiencing a "bubble," and whether policy makers should attempt to pop the bubble. Because a resilient financial system can withstand unexpected developments, identification of bubbles is less critical. As global financial markets continue their five-years-and-counting rally, urged along by policy from the Fed and other central banks, worry has been rising that the seeds are being sown for the next crisis. The Bank for International Settlements, the organization based in Basel, Switzerland, that is effectively the central bank for the central banks, argued just that in a major new report that essentially accuses its own members of fecklessness in their easy-money policies. The leader of the most powerful of those central banks isn't buying it, and her speech is a shot across the bow arguing that higher interest rates are not the answer to whatever financial excesses one sees. "Monetary policy faces significant limitations as a tool to promote financial stability," Ms. Yellen said in an event at the International Monetary Fund in Washington. "Its effects on financial vulnerabilities ... are not well understood and are less direct than a regulatory or supervisory approach; in addition, efforts to promote financial stability through adjustments in interest rates would increase the volatility of inflation and employment." The Fed is focused on making sure that even if markets in, say, leveraged buyout loans were to take a dive from current frothy levels (this is the one market Ms. Yellen herself mentioned as showing signs of excess), the impact wouldn't ripple through banks and other financial institutions and cause a broad downturn for the economy. They are doing this by demanding that banks hold more capital, and that they constantly test their portfolios to ensure they could weather a downturn, among other steps. But the most interesting parts of Ms. Yellen's speech were not so much her cataloging of specific tools the Fed is using to try to address financial risk, many of which watchers of the central bank's communications have heard about before. It was in her use of recent experiences in the United States and abroad to explain why she thinks interest rate policy is a poor substitute for good regulation.

## **Impact turn – increase rates now good**

**Morgan 7/18/14**--Contributor[Herb, "Bernanke Pitched A Gem, Yellen Needs To Raise Rates For The Save", Forbes Magazine, 7/18/2014

<http://www.forbes.com/sites/greatspeculations/2014/07/18/bernanke-pitched-a-gem-yellen-needs-to-raise-rates-for-the-save/>, accessed 7/19/14]RMT

Because **the decisions the Fed made were of such great magnitude, they came with very real risks.** The **lowest interest rate environment ever seen has encouraged risk taking that could lead to the formation of dangerous bubbles.** The **massive increase in the monetary base sows the seeds for inflation.** Under the Humphrey-Hawkins HWKN +4.12% Full Employment Act of 1978 **the Fed was given additional responsibilities to "maintain price stability" and to "foster full employment."** These two mandated **objectives often conflict with each other.** Of course, the Fed debates these issues frequently. I believe that **the Fed should take steps now to prevent an upward movement in consumer inflation.** For starters, **employment trends are improving.** The **June payrolls report showed that the U.S. added 288,000 jobs in June, and it made significant upward revisions to the April and May data.** **Headline unemployment is down to 6.1%.** Strength in the labor market is manifested in other areas as well. **Average hourly earnings of workers in private industries are growing at about a 2.5% clip, which is above the Fed's 2.0% Core PCE inflation target.** The **median usual weekly earnings growth rate of U.S. workers is now above the pre-crisis growth rate at just under 3%.** The **National Federation of Independent Business (NFIB) survey of companies shows a large number of companies surveyed saying that they plan to raise worker compensation in the near future.** Further, **the actual business sector unit labor costs rate of change has spiked sharply higher from 0% in 2012 to nearly 7% today.** Historically, **when wage inflation takes hold, it doesn't wane for 4-5 years.** It would be sad for the Fed, which has performed nearly perfectly until now, to overshoot its inflation target. **The Fed needs to make the tough decision now to raise short-term interest rates to avoid greater problems with inflation.** A recent Reuters poll showed that **economists expect the first short-term rate hikes to come in the second quarter of 2015.** There is a danger that may not be soon enough.

